



US EPA RECORDS CENTER REGION 5



475688

PRE-DESIGN INVESTIGATION TECHNICAL MEMORANDUM OPERABLE UNIT 3

Nease Chemical Site, Columbiana and Mahoning
Counties, Ohio

REPORT

Submitted To: U.S. Environmental Protection Agency
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Chicago, IL 60604

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August 2011

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August 1, 2011

Project No. 933-6154

Mr. Dion Novak
USEPA Region V (SR-6J)
77 West Jackson Boulevard
Chicago, IL 60604

**RE: PRE-DESIGN INVESTIGATION TECHNICAL MEMORANDUM FOR OPERABLE UNIT 3
NEASE CHEMICAL SITE, COLUMBIANA AND MAHONING COUNTIES, OHIO**

Dear Dion,

On behalf of RÜTGERS Organics Corporation (ROC), Golder Associates Inc. (Golder Associates) is pleased to submit the Pre-Design Investigation Technical Memorandum for Operable Unit 3 of the Nease Chemical Site located in Mahoning and Columbiana Counties, Ohio. Copies have also been sent directly to the Ohio Environmental Protection Agency (Ohio EPA).

This Technical Memorandum provides a description of the Pre-Design Investigation activities conducted in support of the upcoming Remedial Design work for OU-3. A preliminary summary of these activities and the results of analytical testing available at that time were shared with the Agencies during our meeting on June 1, 2011. This report provides further evaluation of the results and includes the fish tissue analytical data that were not available at the time of our meeting.

If you should have any questions during your review, please do not hesitate to contact Dr. Rainer Domalski at ROC (814/238-5200) or the undersigned (856/793-2005). We look forward to working with the Agencies as we move forward into the Remedial Design stage of work for the Site.

Very truly yours,

GOLDER ASSOCIATES INC.

Andrew P. Joslyn
Senior Project Environmental Engineer

P. Stephen Finn, C. Eng.
Principal

cc: Sheila Abraham Ohio EPA
Rainer Domalski ROC

APJ/PSF/bjb





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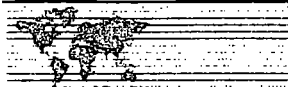
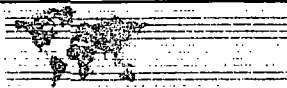


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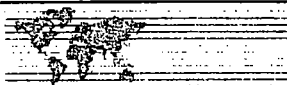
1.0 INTRODUCTION

This Pre-Design Investigation (PDI) Technical Memorandum (TM) has been prepared by Golder Associates Inc. (Golder), on behalf of RUTGERS Organics Corporation (ROC), for Operable Unit 3 (OU-3) of the Nease Chemical Site, located in Columbiana and Mahoning Counties, Ohio (Site). OU-3 comprises contaminated portions of Feeder Creek (located at the former Nease Chemical Facility) and Middle Fork Little Beaver Creek (MFLBC), including associated floodplain soils. Figure 1 shows the location of the Site (including the former Nease facility and the MFLBC). This PDI TM describes the investigation procedures followed for the PDI field work conducted between September 2009¹ and March 2011 pursuant to the PDI Work Plan (Work Plan), which was approved by the United States Environmental Protection Agency (USEPA) on September 8, 2010. The PDI TM also presents the analytical laboratory results for the samples collected during the PDI. The Work Plan was prepared pursuant to the Administrative Order on Consent (AOC) between ROC and USEPA effective June 30, 2009. The overall purpose of this report is to present analytical results that will form the foundation for the Remedial Design (RD).

The former Nease Chemical Facility, located on Benton Road near Allen Road in Salem, Ohio included a manufacturing area (west of the Norfolk Southern Railroad tracks) and wastewater ponds (on both sides of the railroad tracks). Feeder Creek flows from the Nease property (on the east side of the railroad tracks) to the MFLBC and likely represented the primary transport route for Site-related contaminants to enter the MFLBC system. The confluence of Feeder Creek and the MFLBC is at about MFLBC River Mile (RM) 37.6. From there, the MFLBC flows northeast into Mahoning County and then turns back to the south and flows back into and through Columbiana County until it joins with two other creeks (North Fork and West Fork) to form Little Beaver Creek, which flows south to the Ohio River.

The MFLBC has a total river mile length of approximately 40.6 miles and all waters of the MFLBC are designated for agriculture, industry, and primary contact uses, but none are designated for "drink" use. The properties bordering the MFLBC include residential, recreational, agricultural, and industrial/commercial uses. As shown in the aerial photograph on Figure 1, land use along the creek from river mile (RM) 37.6 through RM 31.0 can be classified as "rural", consisting of primarily agricultural land with some dispersed residential areas, and relatively little commercial use. Colonial Villa, a mobile home community, represents the most densely populated residential area within the target reach and it is located between RM 35.0 and RM 36.0. The contaminant of concern in OU3 is mirex, which was the main focus of the PDI study.

¹ September 2009 activities were conducted pursuant to a separate Reconnaissance Work Plan that was approved by the Agencies on September 11, 2009



2.0 DESCRIPTION OF FIELD ACTIVITIES

The overall objective for the OU-3 PDI was to define the extent and distribution of mirex contamination in MFLBC sediments, adjacent floodplain soils, and fish between RM 37.6 and 31.0. These data will be used to identify specific target areas for remediation where mirex surface-weighted average concentrations (SWACs) exceed clean-up levels, and to identify areas of high quality habitat within areas targeted for remediation. The PDI data will also serve as "baseline" data against which future long-term monitoring results can be compared. The extent of the overall sampling program is shown on Figure 2.

*to refine previous
PI data investigation
and to
help to
focus RO
on areas
for
remediation*

2.1 MFLBC Reconnaissance

2.1.1 Overview

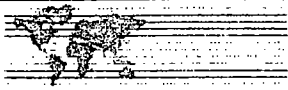
As specified in the AOC Statement of Work (SOW), Site Reconnaissance was required as a first step in the PDI, and a Work Plan Memorandum describing the planned reconnaissance activities was submitted to the Agencies on August 24, 2009. The Agencies provided comments via e-mail on August 31, 2009 and ROC also provided responses to these comments on August 31, 2009. The Agencies approved the Work Plan Memorandum (as modified by the response to comments) on September 11, 2009.

In order to facilitate dynamic decision-making and efficient data collection in the PDI, the Site Reconnaissance described in the Work Plan Memorandum included some portions of the PDI scope required by the SOW, in addition to the basic requirements specified for the Site Reconnaissance.

The reconnaissance included the following tasks, as outlined in the PDI Reconnaissance Work Plan Memorandum:

- Detailed mapping of the extent of fine-grained sediment bodies from RM 37.6 through 31.0² using a handheld global positioning system (GPS) device.
- Detailed description of fine-grained sediment through collection of cores and/or grab samples of sediment within the mapped sediment bodies for visual classification.
- Description of general sediment type in areas adjacent to fine-grained sediment bodies, including at least one description per 0.1 river mile (for segments that included fine-grained sediment).
- Laboratory grain size analyses of each significant fine-grained sediment "type" encountered.
- Photographic documentation of the stream channel and banks at each 0.1 river mile.
- Mapping of obstructions within the stream that might interfere with investigation or remediation activities (including photographic documentation).
- Identification of areas of high quality habitat.

² As agreed with Ohio EPA's on-site representative, one segment of the stream from RM 36.4 to RM 36.7 was not mapped during the Reconnaissance based on the objections of a nearby riparian area property owner. Access agreements for portions of RM 36.4 to 36.7 were later signed by the property owners, so the area was sampled during the PDI sampling activities.



- Discussions with riparian area property owners³ regarding the upcoming PDI work and associated access requirements.

2.1.2 Results

A Trimble GeoXH handheld GPS device running ESRI's ArcPad software version 8.0 with possible GPS horizontal accuracy of 1 ft or better was used to collect spatial data and other observations in the field. For each location measurement collected with the handheld GPS unit, the estimated accuracy is recorded by the device. Accuracy can be influenced by time of day (number and locations of available satellites) and by obstructions such as bridges and the forest canopy, so in some cases, the theoretically possible accuracy was not achieved during the Reconnaissance work. The rated accuracy of the device is also influenced by the exact position of the satellites it uses. The positions of satellites may shift slightly from the predicted positions, so the GPS device accounts for these possible shifts when determining the estimated accuracy of the data. In order to reduce the uncertainty related to the exact positions of satellites, there are services that collect data on the satellite locations and by using these data, it is possible to revise the location information collected by the GPS in the field, and in many cases, the confidence in the GPS data (and therefore the accuracy) is significantly increased by using known satellite positions. This process is referred to as post-processing. Post-processing of the data was conducted using Trimble GPS Analyst's Differential Correction tool and the results indicate that approximately 91% of the location data collected were accurate to within 1 meter with about 56% being accurate to within 0.5 meter. The accuracy of the collected locations is important because the GPS location data were used for identifying sampling locations during the PDI sampling and will also be used for design purposes.

The detailed mapping of sediment bodies showed that between RM 31.0 and approximately RM 36.3, the majority of fine-grained sediment is located in small pockets close to the banks of the stream in areas that would be expected to be depositional given the stream morphology. These are areas where water velocities are slower (such as on the outsides of bends), allowing fine particles to settle out of suspension. In addition, fine-grained sediment is limited to a thickness of 1 or 2 inches in most places, and in some areas, fine-grained sediment is found only in the interstices between larger cobbles. From RM 36.3 to at least RM 37.7, fine-grained sediment is trapped by submerged aquatic vegetation (*elodea* or similar species) that covers up to 70% of the streambed in some areas. These plants cause the water velocity to slow, allowing fine-grained sediment to settle out and collect near the roots of the plants. These plants were typically found growing in coarser materials, such as sands and gravels, so the fine-grained sediment in these areas is restricted to a thickness of 1 to 2 inches at the base of the vegetation. The frequency of occurrence of this aquatic vegetation throughout this segment of the stream appeared to be higher than in previous investigations suggesting that the growth may be a relatively recent occurrence, potentially as a result of increased nutrient loading, or other non-Site related environmental factors.

³ These discussions were coordinated and primarily conducted by Ohio EPA.



In addition to the sediment mapping activities, the locations of obstructions in the stream were also recorded and photographed to aid in the development of future remediation plans. A total of 51 obstructions (typically fallen trees blocking the stream) were encountered. In addition, at least four photographs were taken in 0.1 RM segments to provide information about the stream habitat quality, physical access, and floodplain conditions (see Appendix A). The locations of photographs were recorded using the GPS and are shown on Figures 3 through 9.

2.2 MFLBC Sediment Sampling

2.2.1 Overview

The purpose of sediment sampling in MFLBC was to obtain current representative mirex concentration data at a high enough resolution to allow for calculations of surface-weighted average concentrations (SWACs) for each one river mile exposure unit. As stated in the Work Plan, mirex tends to adhere to fine-grained, organic-rich sediments. Therefore, the results of the detailed mapping of fine-grained sediments performed during the reconnaissance were used to identify sediment sampling locations. Sediment samples were collected as composites across 0.1 river mile areas and analyzed for mirex, total organic carbon (TOC), grain size distribution, and total solids by TestAmerica, Inc. of North Canton, OH (TA). The sediment remedy is to be designed to achieve a SWAC of 0.5 mg/kg for each 1 mile exposure area between RM 31.0 and RM 37.6. The results of the PDI reconnaissance and sampling will be used to determine how to achieve clean-up levels while protecting habitat to the greatest extent possible. As described in the Record of Decision (ROD), the clean-up level may be modified during detailed design to be as high as 0.75 mg/kg in certain reaches so as to protect areas of high-quality habitat.

A total of 42 composite fine-grained samples and 7 coarse-grained samples were collected (not including field duplicates and matrix spike/matrix spike duplicates [MS/MSDs]) at the locations shown on Figures 3 through 9. The analytical results from sediment samples are discussed in Section 3.2. Table 1 summarizes the composite samples and indicates deviations from the proposed sampling plan, and Table 2 lists all the sub-sample locations that comprise the composite samples. Field changes to the overall sampling program were required for the following reasons:

- Fine-grained sediment was found primarily on only one side of the MFLBC at any given location. The proposed sampling program from the Work Plan indicated that it might be appropriate in some areas to collect separate samples from each side of the stream to help with appropriate staging of sediment removal during remedial action. However, the field team determined that one sample was appropriate in most cases.
- Sediment depth – The Work Plan included an allowance for collecting samples from deeper than 6 inches and archiving them; however, fine-grained sediments were not found during sampling at depths greater than 6 inches, so deeper samples could not be collected.



- Access restrictions - Certain portions of the stream could not be sampled because it was not possible to obtain access agreements from the associated property owner; however, these areas represented a small percentage of the overall sampling area. Table 1 shows which proposed samples could not be collected for this reason.

what
potential
impacts
to
SWAC
calcs?

2.2.2 Field Procedures

Sediment samples were collected consistent with the approved Work Plan except for the following minor deviation, which was agreed to by the on-Site Ohio EPA representative.

- Plastic 5-gallon buckets were not used to reduce surface water flow as this had not been done during previous MFLBC sampling events, and the logistics of transporting all the necessary equipment would have required many more trips through adjacent property owners' land and may have led to more disturbance of the sediment.

The field procedures for collecting sediment samples were as follows:

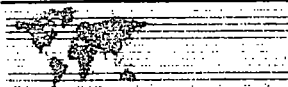
- Each sub-sample location was identified based on presence of fine-grained sediment, using results of prior Reconnaissance work to help locate sediment bodies
- Handheld GPS was used to mark sediment sub-sample location and to enter a sub-sample ID and description
- Decontaminated stainless steel spoon and bowl were used (new spoon and bowl were used at the start of each new composite) to collect sub-samples. Decontamination included an initial water rub/rinse, cleaning with soapy water and rinse with tap water, rinse with distilled water, and final rinse with acetone.
- Large debris such as whole leaves and twigs were removed prior to homogenization
- Sub-sample homogenized thoroughly with previous sub-samples
- At completion of composite area, sample was thoroughly homogenized and then distributed into sampling containers (amber jar for mirex to avoid photo-degradation, clear jar for TOC, and 1-gallon zip-top bag for grain size)
- Sediment samples were transported under Chain of Custody to TA for analysis

2.3 MFLBC Floodplain Soil Sampling

2.3.1 Overview

The main objectives of the floodplain soil investigation were to refine the extent of mirex impacts and to characterize the physical conditions of the floodplain for design purposes. Composite samples were collected from $\frac{1}{4}$ acre and $\frac{1}{2}$ acre areas within each 1-acre exposure unit and analyzed for mirex, TOC, and grain size distribution. As described in the ROD, the floodplain soil remedy is to be designed to achieve a SWAC of 1.0 mg/kg for each 1-acre exposure area. The results of the investigation will be used to determine how to achieve the clean-up level while protecting habitat to the maximum extent possible.

The sampling approach was designed to achieve a higher-density of samples than had previously been collected in the areas targeted for remediation, and to better represent appropriate exposure units. Horizontal composite soil samples were collected from approximately rectangular $\frac{1}{4}$ -acre areas so that



there would be 4 samples for each 1-acre exposure unit area. Each $\frac{1}{4}$ -acre sub-sample contained at least 5 grab samples from distinct locations within the area, so the overall exposure unit was represented by at least 20 samples. A total of 192 samples (not including duplicates and MS/MSDs) were collected: 63 $\frac{1}{2}$ -acre samples and 129 $\frac{1}{4}$ -acre samples.

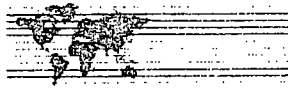
Aliquots of the homogenized soil from each pair of $\frac{1}{4}$ -acre composite samples were combined into one $\frac{1}{2}$ -acre primary sample. The $\frac{1}{2}$ -acre composite samples were analyzed first, while the $\frac{1}{4}$ -acre samples were archived at the laboratory⁴. The sequence for analysis of $\frac{1}{2}$ -acre samples began with those areas in or immediately adjacent to previously sampled areas where the clean-up level was exceeded. Composite samples from adjacent $\frac{1}{2}$ -acre areas were initially archived. These samples were then analyzed sequentially beginning with those bordering the initial samples, followed by additional adjacent samples until a concentration below the clean-up level was measured across the entire floodplain width. Figures 10 and 11 show all samples collected, the samples that were analyzed, and those that remain archived. The $\frac{1}{4}$ -acre composite samples were archived so that if significant areas of floodplain soil exceeded the cleanup level, then the area to be addressed could be refined. For example, if one $\frac{1}{2}$ -acre area was slightly above the cleanup level, then the two separate $\frac{1}{4}$ -acre samples may be analyzed to determine if only a portion of that overall $\frac{1}{2}$ -acre was actually exceeding the cleanup goal, rather than the entire area. However, based on the results of the sampling program, it was not deemed necessary to analyze any of the archived $\frac{1}{4}$ -acre samples. Table 3 provides a summary of all the areas sampled and the samples analyzed at the laboratory. The analytical results are discussed in Section 3.3. *reason?*

2.3.2 Field Procedures

Floodplain soil samples were collected consistent with the approved Work Plan except for the following minor deviations, which were agreed to by the on-Site Ohio EPA representative.

- Sub-sample locations were not homogenized in a separate bowl before being added to the composite. This was because a trowel was used for sampling, which achieved approximately an equal volume at each sample location. The entire composite sample was mixed after each discrete sub-sample was added so that a better homogenized sample would be achieved by the time the entire composite was collected.
- Only half of the proposed $\frac{1}{2}$ -acre area near RM 35.3 (FPS10-002) could be sampled because the southern half of that area is covered (paved) by a wastewater treatment facility associated with the adjacent mobile home park. Therefore, this area was represented by one $\frac{1}{4}$ -acre sample (FPS10-002-01), which was analyzed immediately in place of the proposed $\frac{1}{2}$ -acre area sample. *where memorialized*
- In addition to the area noted above, there was one additional $\frac{1}{2}$ -acre area for which a sample was not collected. After collecting the two $\frac{1}{4}$ -acre samples within area FPS10-008 (i.e., FPS10-008-01 and FPS10-008-02), there was insufficient sample volume to prepare a composite $\frac{1}{2}$ -acre sample. Therefore, the separate $\frac{1}{4}$ -acre samples were both analyzed in place of the $\frac{1}{2}$ -acre sample. This does not represent a significant deviation

⁴ Three $\frac{1}{4}$ -acre samples were analyzed immediately because there was no associated $\frac{1}{2}$ -acre area sample available. More details are provided in Section 3.



from the work plan because the two adjacent $\frac{1}{4}$ -acre sample results can be mathematically averaged to indicate the concentration of the $\frac{1}{2}$ -acre area.

any special circumstances to consider when averaging

The field procedures for collecting sediment samples at each $\frac{1}{4}$ -acre composite area were as follows:

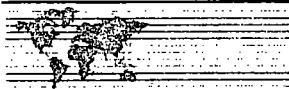
- At least five equal volume sub-samples were collected using decontaminated stainless steel trowels and placed in a decontaminated stainless steel bowl. Decontamination included an initial water rub/rinse, cleaning with soapy water and rinse with tap water, rinse with distilled water, and final rinse with acetone.
- At each sub-sample location the sampling equipment was advanced to a depth of approximately 6-inches below ground surface after surface vegetation and associated root matter was removed.
- Each sub-sample location was recorded using a handheld GPS device.
- Large debris items (such as rocks, twigs, and large roots) were removed prior to homogenization.
- Each sub-sample was homogenized thoroughly with previous sub-samples
- Remaining soil from the first $\frac{1}{4}$ -acre sample within a given $\frac{1}{2}$ -acre area was held until sampling of the adjacent $\frac{1}{4}$ -acre composite sample was collected.
- Each set of two adjacent homogenized $\frac{1}{4}$ -acre composite samples were combined into one composite sample representing the associated $\frac{1}{2}$ -acre area.
- At completion of each composite area, samples were thoroughly homogenized and then distributed into sampling containers (amber jar for mirex to avoid photo-degradation, clear jar for TOC, and 1-gallon zip top plastic bag for grain size)
- Soil samples were transported under Chain of Custody to TA for analysis or archiving, as appropriate.

2.4 MFLBC Fish Tissue Sampling

2.4.1 Overview

reason?

The purpose of the fish tissue investigation, as noted in the SOW, was to provide a baseline sampling event consistent with the anticipated long-term fish tissue monitoring program. Seven locations were selected for fish tissue sampling: RM 38.4, RM 37.5, RM 36.7, RM 35.4, RM 33.3, RM 32.0, and RM 12.5. The stations at RM 38.4 and RM 12.5 were chosen as upstream and downstream reference points, respectively, to compare with data from within the reach of concern (i.e., between RM 31.0 and RM 37.6). As explained in the Work Plan, the final sampling locations and number of samples collected were contingent upon access limitations. The upstream and downstream ends of each sampling reach were recorded using a handheld GPS device (see Figure 2). Based on the Ohio EPA's recommendations (see Appendix C of the Work Plan), three resident fish species were targeted for sampling and analysis at each location: common carp, yellow bullhead, and white sucker. The post-remediation, long-term sampling program is anticipated to begin no sooner than 5 years after construction completion. Therefore, in order to be consistent with the long-term data, fish between the ages of 3 and 5 years old (as determined by fish length) were targeted. For each individual fish, the fillet and offal (i.e., all parts of the fish after the fillet is removed) were collected. This sampling approach was used because potential



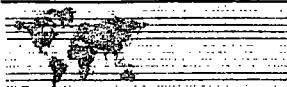
human exposures are assessed based on fillet data, whereas potential wildlife exposures are based on the whole-body fish tissue. Because laboratory analysis of fillet and whole-body samples from identical fish is not possible, the fillet and offal were analyzed separately so that whole body concentrations could be calculated. By obtaining fillet and whole body data from the same fish, it may be possible to reduce the sampling program in the future (e.g., if a reliable fillet to whole body concentration ratio can be determined, then only fillets may be collected in the future). The only deviations from the proposed sampling program resulted from a lack of certain species at some sampling stations and/or fish sometimes being outside the targeted size range. Table 4 provides a summary of the fish tissue samples collected, including number of fish, lengths and (field-measured) weights of fish.

2.4.2 Field Procedures

Sampling procedures used were consistent with the proposed methods in the Work Plan. At each sampling station, fish were collected using a boat-mounted electroshocker (moving from downstream to upstream so as to limit the disturbance of sediment and fish prior to collection, when possible) by a joint sampling team comprising Ohio EPA and Golder personnel. During electroshocking, fish of the target species were collected into a 5-gallon plastic bucket (or similar suitable container) filled with stream water for temporary containment. After the entire target stream station had been sampled, the fish were taken to a sample preparation area.

When sufficient fish were present, composite samples (by species) were collected using a minimum of three fish⁵ within the appropriate size range for that species (see Appendix C of the Work Plan). Fish samples were filleted in the field after the length and weight were measured and recorded. Fillet samples and the remaining offal were wrapped separately in clean aluminum foil, placed in sealed plastic bags, and stored on dry ice. Common carp, yellow bullhead, and white sucker were all filleted with the skin off, consistent with Ohio EPA's fish tissue monitoring program. Decontaminated stainless steel fillet knives were used for each sample. Decontamination included an initial water rub/rinse, cleaning with soapy water, rinse with distilled water, and final rinse with acetone. Fillet boards were covered with clean aluminum foil for each sample. Latex/nitrile gloves were worn while processing fillet samples, and were changed between each sample. Fillet samples were rinsed in river water prior to placing on clean aluminum foil. Sampling protocols followed those listed in the Ohio EPA Fish Tissue Guidance Manual (Ohio EPA, 2004); however, it was not necessary to decontaminate aluminum foil that was used directly from the roll. All samples were placed on dry ice and were transported via courier to the laboratory under chain of custody for preparation/homogenization. Prior to preparation/homogenization of the samples at the laboratory, the laboratory weighed the fillet and offal samples separately to obtain total sample mass values for later use in calculating the whole-body mirex and lipid concentrations. Fish samples were analyzed by Ohio EPA's DES laboratory located in Reynoldsburg, Ohio.

⁵ Although a minimum of three fish is optimal, final decisions regarding which samples to analyze were made after all stations had been sampled. In some cases, samples were analyzed even when they did not comprise tissue from three fish.



3.0 OU-3 SAMPLING RESULTS

The PDI sampling program achieved the stated goals in the SOW and Work Plan. Although there were some deviations from the proposed sampling program, sufficient data were collected to allow for remedial design to move forward and to provide a baseline sampling round prior to remedial action.

Complete laboratory analytical results are provided on disk in Appendix B.

3.1 Data Validation

Sample holding times were met for all samples and no data were rejected during data validation. A Data Quality Assessment describing the findings of the data validation is provided in Appendix C and data are summarized in tables for the various MFLBC media as described below.

3.2 MFLBC Sediment Analytical Results

A total of 49 sediment samples were collected (not including duplicates and MS/MSDs⁶), 44 of which were analyzed by TA for mirex, TOC, and grain size (the remaining samples were archived). In addition, there were four field duplicate samples analyzed. The validated analytical results are shown in Table 5.

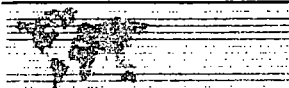
3.2.1 Discussion of Mirex Results

Mirex concentrations ranged from non-detect to 1.1 mg/kg, with only 6 of 49 individual samples exceeding the SWAC-based cleanup level of 0.5 mg/kg. The highest mirex concentrations were found in samples from RM 35.4 and RM 34.9, which are in the area where mirex has previously been detected at elevated concentrations in both sediment and floodplain soil. However, the extent of mirex impacts above the cleanup level was found to be lower than in previous sampling events. This data suggests improvement in sediment mirex conditions over time, which is supported by the fish tissue results as discussed in Section 3.4. A graph showing maximum detected sediment concentrations throughout the MFLBC in multiple sampling events is provided as Figure 12.

3.2.2 Surface-Weighted Average Concentration for Mirex in Sediment

Surface-weighted average concentrations (SWAC) for mirex in MFLBC sediment were calculated by using the tabulated sediment body areas from the Reconnaissance as well as additional areas identified during PDI sampling (see Table 6). For each 0.1 RM area sampled, the total surface area of sampled sediment bodies was calculated as the sum of all the individual sediment body surface areas. This total surface area was then multiplied by the mirex concentration from the composite sediment sample for that 0.1 river mile segment. Adjacent segments were then grouped into one river mile exposure units as follows: RM 31.1 thru 32.0; RM 32.1 thru 33.0; RM 33.1 thru 34.0; RM 34.5 thru 35.4; RM 35.5 thru 36.4;

⁶ For the purposes of the discussion in this section, generalizations about ranges of mirex concentrations and number of samples above certain concentrations include either the primary sample result or the field duplicate result (for locations where duplicates were collected), whichever was higher.



and RM 36.7 thru 37.6. Note that RM 34.1 thru RM 34.4 was not included in any of the segments because there was only one result from this reach and the concentration was very low (0.016 mg/kg). Therefore, it was more protective to consider a segment that included the two highest detections of mirex, which were at RM 35.4 and RM 34.9. In addition, the reach from RM 36.5 to RM 36.6 was not included in any of the segments as there were no samples collected from this area (access was not granted by the property owner).

The calculated SWAC mirex concentrations for sediment are provided in Table 7. As shown on the table, only one segment – RM 34.5 through RM 35.4 – had a SWAC concentration above the cleanup goal of 0.5 mg/kg. This river mile segment included the two highest detected mirex concentrations in sediment and it spans an area where floodplain soil mirex concentrations also exceed the Site cleanup level for that medium. The rest of the exposure units had mirex SWACs ranging from 0.0564 mg/kg to 0.219 mg/kg.

*does this use
all data or
just the
PDI
data?*

3.3 MFLBC Floodplain Soil Analytical Results

A total of 192 floodplain soil samples (not including field duplicates and MS/MSDs⁶) were collected (63 from ½-acre composite areas, and 129 from the ¼-acre composite sub-areas). Of the 192 samples, 52 were analyzed for mirex, TOC, and grain size and the rest were archived (some of the analyzed samples were initially archived but were later analyzed). The majority of the ¼-acre composite area samples were archived, but three were analyzed due to a lack of an associated half-acre sample. In addition, there were nine field duplicate samples analyzed. The validated analytical results are shown in Table 8.

3.3.1 Discussion of Mirex Results

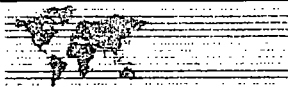
Mirex concentrations in floodplain soil samples ranged from 0.0086 to 1.400 mg/kg. Out of 52 samples analyzed, only seven exceeded the cleanup goal of 1.0 mg/kg. The average concentration of all analyzed samples was 0.591 mg/kg.

3.3.2 Calculation of Exposure Unit (1-acre) Concentrations

For areas where the mirex concentration for a ½-acre sample exceeded the clean-up level of 1.0 mg/kg, a 1-acre exposure unit SWAC was calculated by averaging that ½-acre sample result with the adjacent ½ acre area sample with the highest mirex concentration (for example, FPS10-20 was combined with FPS10-21). The combinations of ½-acre sample areas to create 1-acre exposure units are shown on Figures 10 and 11. As shown on the figures, there are four (4) 1-acre exposure areas⁷ that have a mirex concentration above the cleanup goal of 1.0 mg/kg.

*does this use all data
or just the PDI data*

⁷ Previous discrete sampling results were not used in developing exposure area concentrations. The PDI sampling was designed to provide reliable surface weighted average concentrations consistent with the ROD cleanup goals and so replace previous sampling results.



3.4 MFLBC Fish Tissue Analytical Results

Ohio EPA's laboratory homogenized the samples, and analyzed a total of 12 fillet, 12 offal, and 1 whole body⁸ samples for mirex and percent lipids. Analytical results for fish tissue samples are provided in Table 9.

3.4.1 Discussion of Fillet and Offal Mirex and Lipid Results

Mirex concentrations in fillet samples ranged from non-detect (at the upstream sampling location) to 1.22 mg/kg. Out of 12 fillet samples analyzed, eight had mirex concentrations below Ohio's unrestricted consumption advisory level of 0.2 mg/kg. Two of the four samples that exceeded 0.2 mg/kg were fillet samples from common carp that were above the target size range, suggesting that these fish have been in the system for more than 5 years, and so they may not be representative of current exposure conditions. For example, the highest fillet mirex concentration (1.22 mg/kg) was detected in the common carp sample from RM 33.3, which was a composite sample that included two fish greater than 580 millimeters (mm) long, which is over 30% longer than the 5-year old size limit specified by Ohio EPA for common carp (440 mm). The arithmetic average mirex concentration in fillet samples (using ½ the detection limit for the non-detect results) is 0.272 mg/kg, while the average concentration excluding the highest common carp sample result is 0.186 mg/kg, below the unrestricted consumption level. A graph showing maximum detected fillet mirex concentrations throughout the MFLBC in multiple sampling events is provided as Figure 13. Figure 14 compares fillet results from 2005 and 2010 from the same species and sampling locations and shows lower concentrations in 2010 in every case, even for common carp that exceeded the approximately 5-year old size.

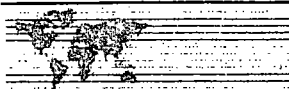
but represent impacts from site

Lipid content in fillet samples ranged from 0.437% to 3.31%. Lipid content was not strongly correlated with mirex concentration. The fillet sample with the highest lipid content was from a common carp collected near Lisbon Dam (at RM 12.5), which is in an area with very low mirex concentration in sediment; as a result, mirex concentrations in fish are also low.

Offal results typically had both higher lipid content and higher mirex concentrations, as expected. Mirex concentrations in offal samples ranged from non-detect (at the upstream sample location) to 3.38 mg/kg. Similar to the fillet samples, the highest mirex concentration occurred in the common carp sample from RM 33.3, which was well above the 5-year old size limit targeted for collection in the PDI. Lipid content in offal samples ranged from 1.18% to 8.69%.

Sheldon?

⁸ The yellow bullhead fish collected at RM 36.7 were too small to fillet, so this sample was submitted as a whole body fish tissue sample.



3.4.2 Whole Body Fish Tissue Concentrations

Whole body fish tissue concentrations were calculated using the formula below:

$$WBC = \frac{(FC \times FM) + (OC \times OM)}{(FM + OM)}$$

where:

WBC = whole body concentration (lipid or mirex) (mg/kg or %)

FC = concentration in the fillet sample (mg/kg or %)

FM = total mass of the fillet sample (kg)

OC = concentration in the offal sample (mg/kg or %)

OM = total mass of the offal sample (kg)

Fillet and offal mass were recorded both in the field and at the analytical laboratory. Table 10 provides a summary of the measured mass of each sample. As shown on the table, there was generally very good correlation between field-measured and laboratory-measured masses. For the purpose of whole body concentration calculations, the more precise laboratory-reported mass values were used. Table 11 provides the calculated whole body fish tissue mirex concentrations and % lipids. An example of the calculation for mirex is provided below for white suckers at RM 33.3.

White Sucker Fillet at RM 33.3 (FT10-33.3-WS-F)	Mirex → FC = 0.130 mg/kg
	Mass → FM = 0.292 kg
White Sucker Offal at RM 33.3 (FT10-33.3-WS-O)	Mirex → OC = 1.02 mg/kg
	Mass → OM = 0.890 kg
WBC (mirex) = (0.130 * 0.292 + 1.02 * 0.890) / (0.292 + 0.890) = (0.94576 mg)/(1.182 kg) = 0.800 mg/kg	

Table 11 also provides values for whole body-to-fillet mirex and lipid ratios. These ratios suggest a strong correlation (correlation coefficient = 0.80 for detected results) between the lipid and mirex ratios, which is to be expected given that mirex tends to partition into lipids. In other words, the ratio of whole body mirex concentration to fillet mirex concentration is strongly correlated with the ratio of lipid content between whole body and fillets from the same fish.

Out of 13 calculated whole body concentrations, only one exceeds the Lowest Observed Adverse Effect Level (LOAEL)-based target tissue concentration based on ecological risk (1.54 mg/kg), which was the basis for establishing the sediment cleanup goal in the ROD. The one sample that was above 1.54 mg/kg was from a common carp sample that was well above the target size range, indicating that this carp is not representative of current fish exposures. A graph showing maximum detected whole body fish mirex concentrations throughout the MFLBC in multiple sampling events is provided as Figure 15.



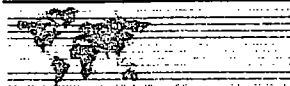
4.0 CONCLUSIONS

The Pre-Design Investigation achieved the goals of providing comprehensive physical and chemical data to design a remedial action that will achieve remedial action objectives for OU-3. In addition, the results of the PDI show that there has been significant natural recovery within the system over the past 5 years since the last sampling event. The following conclusions can be drawn regarding sediment, floodplain soil, and fish tissue:

- **Sediment:** A single 1-mile exposure unit within MFLBC exceeds the Site-specific SWAC cleanup goal of 0.5 mg/kg mirex. The reach that exceeds 0.5 mg/kg extends from RM 34.5 to RM 35.4, although the concentration is driven by two sampling areas at RM 34.9 and RM 35.4. Removal of sediment at RM 35.4 will bring the SWAC concentration in this river mile to below the cleanup goal.
- **Floodplain Soil:** There are four 1-acre exposure units in the floodplain of the MFLBC that have mirex concentrations exceeding the Site-specific SWAC cleanup goal of 1.0 mg/kg. These four exposure units are driven by six half-acre composite sampling areas. Removal of these six half-acre areas will achieve the cleanup goal throughout the floodplain.
- **Fish:** With the exception of one common carp sample at RM 33.3, all whole body fish tissue mirex concentrations were below the LOAEL-based target tissue concentration to achieve acceptable ecological risk. Excluding that same common carp sample, which was not representative of current exposure conditions, the average mirex concentration in fish fillet tissue is below the unlimited consumption level of 0.200 mg/kg specified by Ohio EPA's fish tissue advisory program. In addition, fillet samples collected in 2010 show significant decreases in mirex concentrations compared to the same species collected in 2005 at the same locations.

DEPA

use all data?



5.0 REFERENCES

Ohio EPA 2004. State of Ohio Cooperative Fish Tissue Monitoring Program Fish Collection Guidance Manual.

Golder, 2010. PDI Work Plan for Operable Unit 3 Nease Chemical Company Salem Ohio. Golder Associates, August 2010.

Table 1
MFLBC Sediment Sampling Program Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

PDI Work Plan Anticipated Sampling Program			Field Sampling Program		
River Mile ¹	Anticipated Number of Composite Fine-Grained Sediment Samples	Notes	Samples Collected	Sampling Date	Explanation of Deviations
31.1	2	one sample from each side along stream bank	1 fine-grained	Wed. 9/8/10	East side of stream had only one small area of fine-grained sediment, while the western side had several locations. The one small area on the eastern side was near one of the sediment locations on the western side, so it was incorporated into the sample from the western side.
31.2	1		1 fine-grained	Wed. 9/8/10	none
31.3	2	one sample from 0-6" and one sample from 6-12"	1 fine-grained	Wed. 9/8/10	Deeper material was significantly coarser than originally described during the reconnaissance in 2009, so a deeper sample was not collected.
31.4	1		1 fine-grained	Wed. 9/8/10	none
31.5	-	no fine-grained sediment identified in this segment	0	Wed. 9/8/10	none
31.6	-	no fine-grained sediment identified in this segment	0	Wed. 9/8/10	none
31.7	1		1 fine-grained	Wed. 9/8/10	none
31.8	2	one sample from 0-6" and one sample from 6-12"	1 fine-grained	Wed. 9/8/10	Deeper material was significantly coarser than originally described during the reconnaissance in 2009, so a deeper sample was not collected.
31.9	2	one sample from 0-6" and one sample from 6-12"	1 coarse sample	Wed. 9/8/10	Fine-grained sediment sample planned, but encountered only sand-dominated sediment. Sample collected, but will be archived as coarse sample.
32.0	1		1 fine-grained, 1 coarse	Wed. 9/8/10	Coarse-grained sample collected due to significant deposit of fine-grained sediment slightly upstream under bridge.
32.1	-	no fine-grained sediment identified in this segment	1 fine-grained	Thurs. 9/9/10	Additional, small area of fine-grained sediment encountered and sampled.
32.2	1		1 fine-grained	Thurs. 9/9/10	none
32.3	2	one sample from each side along stream bank	1 fine-grained	Thurs. 9/9/10	One sample was anticipated in the "new" channel dug by property owner, but current conditions are coarse sand.

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PDI Work Plan Anticipated Sampling Program			Field Sampling Program		
River Mile ¹	Anticipated Number of Composite Fine-Grained Sediment Samples	Notes	Samples Collected	Sampling Date	Explanation of Deviations
32.4	-	no fine-grained sediment identified in this segment	0	Thurs. 9/9/10	none
32.5	-	no fine-grained sediment identified in this segment	0	Thurs. 9/9/10	none
32.6	-	no fine-grained sediment identified in this segment	0	Thurs. 9/9/10	none
32.7	-	no fine-grained sediment identified in this segment	0	Thurs. 9/9/10	none
32.8	-	no fine-grained sediment identified in this segment	0	Thurs. 9/9/10	none
32.9	1		1 fine-grained, 1 coarse	Thurs. 9/9/10	selected for coarse-grained sample because in area of historically high mirex in floodplain
33.0	1		1 fine-grained	Thurs. 9/9/10	none
33.1	2	one sample from each side along stream bank	1 fine-grained, plus 1 duplicate	Thurs. 9/9/10	Significant deposit along downstream left bank and a very small pocket of a thin layer on downstream right bank. The small area was simply incorporated into the sample (not large enough to justify a separate sample)
33.2	1		1 fine-grained	Mon. 9/13/10	none
33.3	-	no fine-grained sediment identified in this segment	0	Mon. 9/13/10	none
33.4	-	no fine-grained sediment identified in this segment	0	Mon. 9/13/10	none
33.5	1	Although fine-grained sediment was not identified in this segment during the Reconnaissance, one sample will be collected for confirmation purposes based on the detection of mirex in the 2005 sampling event.	1 fine-grained	Mon. 9/13/10	none
33.6	1		1 fine-grained	Mon. 9/13/10	Majority of sediment was along right-hand side of stream (deepest depth = 2")

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PDI Work Plan Anticipated Sampling Program			Field Sampling Program		
River Mile ¹	Anticipated Number of Composite Fine-Grained Sediment Samples	Notes	Samples Collected	Sampling Date	Explanation of Deviations
33.7	-	no fine-grained sediment identified in this segment	1 fine-grained, plus 1 duplicate	Mon. 9/13/10	Fine-grained sediment was encountered in this reach during the PDI, so a sample was collected
33.8	1		1 fine-grained, 1 coarse	Mon. 9/13/10	Location selected for coarse-grained sample
33.9	1		1 fine-grained	Mon. 9/13/10	none
34.0	-	no fine-grained sediment identified in this segment	0	Mon. 9/13/10	none
34.1	-	no fine-grained sediment identified in this segment	0	Mon. 9/13/10	none
34.2	1		0	Mon. 9/13/10	No fine-grained sediment bodies present
34.3	1		0	Mon. 9/13/10	No fine-grained sediment bodies present
34.4	2	one sample from each side along stream bank	1 fine-grained	Tues. 9/14/10	Majority of sediment was along downstream left-hand side of stream, so all areas were composited into one sample
34.5	1		1 fine-grained	Tues. 9/14/10	none
34.6	2	one sample from each side along stream bank	1 fine-grained	Tues. 9/14/10	Majority of sediment was along downstream left-hand side of stream, so all areas were composited into one sample
34.7	1		0	Tues. 9/14/10	No fine-grained sediment bodies present
34.8	1		1 fine-grained plus 1 MS/MSD (double volume)	Tues. 9/14/10	none
34.9	1		1 fine-grained	Tues. 9/14/10	none
35.0	1		0	Tues. 9/14/10	No fine-grained sediment bodies present
35.1	3	one sample from each side along stream bank, plus one deep sample from 6-12"	1 fine-grained	Tues. 9/14/10	Majority of sediment was along downstream right-hand side of stream and the deepest depth encountered was 2"
35.2	1		1 fine-grained	Tues. 9/14/10	Majority of sediment was along downstream left-hand side of stream, so all areas were composited into one sample

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Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

PDI Work Plan Anticipated Sampling Program			Field Sampling Program		
River Mile ¹	Anticipated Number of Composite Fine-Grained Sediment Samples	Notes	Samples Collected	Sampling Date	Explanation of Deviations
35.3	1		0	Tues. 9/14/10	Not enough sediment to sample; small amount of silt with some fine sand downstream from outfall, but likely a continuation of same sediment body as the one sampled in RM 35.2
35.4	-	no fine-grained sediment identified in this segment	1 coarse sample	Tues. 9/14/10	This location selected for coarse-grained sediment sample given historic detections of mirex in this general area
35.5	-	no fine-grained sediment identified in this segment	Kendall property - no access agreement		
35.6	-	no fine-grained sediment identified in this segment	Kendall property - no access agreement		
35.7	2	one sample from each side along stream bank	1 fine-grained	Wed. 9/15/10	Majority of sediment was along downstream right-hand side of stream
35.8	1		1 fine-grained	Wed. 9/15/10	none
35.9	1		1 fine-grained	Wed. 9/15/10	none
36.0	2	one sample from each side along stream bank	1 fine-grained	Wed. 9/15/10	Majority of sediment was along downstream left-hand side of stream, so all areas were composited into one sample
36.1	1		1 fine-grained, plus 1 duplicate, 1 coarse	Wed. 9/15/10	none; this area selected for coarse-grained sediment sample
36.2	1		1 fine-grained plus 1 MS/MSD (triple volume)	Wed. 9/15/10	none
36.3	2	one sample from each side along stream bank	1 fine-grained	Wed. 9/15/10	Majority of sediment was along downstream left-hand side of stream, so all areas were composited into one sample
36.4	2	one sample from each side along stream bank	1 fine-grained	Wed. 9/15/10	Majority of sediment was along downstream left-hand side of stream, so all areas were composited into one sample
36.5	1		Stainer property - no access agreement		
36.6	-	no fine-grained sediment identified in this segment	Stainer property - no access agreement		

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Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

PDI Work Plan Anticipated Sampling Program			Field Sampling Program		
River Mile ¹	Anticipated Number of Composite Fine-Grained Sediment Samples	Notes	Samples Collected	Sampling Date	Explanation of Deviations
36.7	2	one sample from each side along stream bank	1 fine-grained	Tues. 9/14/10	Majority of sediment was along left-hand side of stream (deepest depth = 2"), including two 20' areas
36.8	2	one sample from each side along stream bank	Schrader property - no access agreement		
36.9	2	one sample from each side along stream bank	Schrader property - no access agreement		
37.0	2	one sample from each side along stream bank	1 fine-grained	Wed. 9/15/10	Even amount of sediment along both sides of stream, but relatively straightforward access for both sides
37.1	1		1 fine-grained	Wed. 9/15/10	none
37.2	2	one sample from each side along stream bank	1 fine-grained	Wed. 9/15/10	Even amount of sediment along both sides of stream, but relatively straightforward access for both sides
37.3	2	one sample from each side along stream bank	1 fine-grained plus 1 MS/MSD (triple volume)	Thurs. 9/16/10	Majority of sediment was along downstream right-hand side of stream, so all areas were composited into one sample
37.4	1		1 fine-grained	Thurs. 9/16/10	none
37.5	1		1 fine-grained, plus 1 duplicate	Thurs. 9/16/10	none
37.6	1		1 fine-grained, 1 coarse	Thurs. 9/16/10	none

Notes:

(1) The stream has been segmented into 0.1 RM lengths and river mile designations refer to the entire 0.1 RM segment starting with the given river mile point and extending downstream to the next river mile point. For example, the 0.1 RM segment from RM 35.4 to RM 35.3 has been assigned a RM value of 35.4, representing the upstream end of the segment.

Table 2
MFLBC Fine-Grained Sediment Sub-Sample Location Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

RM	Sediment Point ID	Associated Composite Sample ID	Easting (ft)	Northing (ft)
31.1	SD10-31.1R-01	SD10-31.1R	2426076	477736
31.1	SD10-31.1R-02		2426085	477754
31.1	SD10-31.1R-03		2426083	477775
31.1	SD10-31.1R-04		2426096	477784
31.1	SD10-31.1R-05		2426084	477804
31.1	SD10-31.1R-06		2426115	477820
31.2	SD10-31.2-03	SD10-31.2L	2426161	478100
31.2	SD10-31.2L-01		2426150	478117
31.2	SD10-31.2L-02		2426162	478113
31.2	SD10-31.2L-04		2426099	478137
31.3	SD10-31.3L-03	SD10-31.3R	2425638	478145
31.3	SD10-31.3R-01		2425876	478206
31.3	SD10-31.3R-02		2425840	478310
31.3	SD10-31.3R-04		2425616	478121
31.3	SD10-31.3R-05		2425596	478134
31.3	SD10-31.3R-06		2425480	478205
31.4	SD10-31.4R-01	SD10-31.4R	2425326	478271
31.4	SD10-31.4R-02		2425276	478187
31.4	SD10-31.4R-03		2425071	478084
31.4	SD10-31.4R-04		2425023	478196
31.7	SD10-31.7L-01	SD10-31.7L	2424207	478027
31.7	SD10-31.7L-02		2424091	478010
31.7	SD10-31.7L-03		2424074	478014
31.7	SD10-31.7L-04		2424048	478021
31.7	SD10-31.7L-05		2423894	478026
31.8	SD10-31.8L-01	SD10-31.8	2423764	478157
31.8	SD10-31.8L-02		2423754	478199
31.8	SD10-31.8L-03		2423736	478216
31.8	SD10-31.8R-01		2423669	478132
32.0	SD10-32.0L-01	SD10-32.0	2422790	478354
32.0	SD10-32.0L-02		2422565	478439
32.0	SD10-32.0R-01		2422499	478447
32.1	SD10-32.1R-01	SD10-32.1R	2422283	478641
32.2	SD10-32.2L-01	SD10-32.2L	2421894	478948
32.3	SD10-32.3L-01	SD10-32.3L	2421696	478995
32.3	SD10-32.3L-02		2421642	479000
32.3	SD10-32.3L-03		2421608	479013
32.3	SD10-32.3L-04		2421589	479006
32.3	SD10-32.3L-06		2421515	478984
32.3	SD10-32.3R-04		2420626	475949

Table 2
MFLBC Fine-Grained Sediment Sub-Sample Location Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

RM	Sediment Point ID	Associated Composite Sample ID	Easting (ft)	Northing (ft)
32.9	SD10-32.9L-02	SD10-32.9C	2421356	476530
32.9	SD10-32.9R-01		2421310	476765
33.0	SD10-33.0R-01	SD10-33.0R	2421286	476059
33.1	SD10-33.1-04	SD10-33.1L	2420827	476249
33.1	SD10-33.1L-01		2420989	476304
33.1	SD10-33.1L-02		2420876	476279
33.1	SD10-33.1L-03		2420862	476272
33.1	SD10-33.1L-05		2420805	476238
33.1	SD10-33.1L-06		2420828	476215
33.2	SD10-33.2L-01	SD10-33.2L	2420765	476205
33.2	SD10-33.2L-02		2420717	476170
33.2	SD10-33.2L-03		2420706	476149
33.2	SD10-33.2L-04		2420659	476105
33.2	SD10-33.2L-06		2420629	476044
33.2	SD10-33.2L-07		2420601	475971
33.2	SD10-33.2L-08	SD10-33.2L	2420555	475880
33.2	SD10-33.2R-01		2420657	476022
33.2	SD10-33.2R-02		2420657	475996
33.2	SD10-33.2R-03		2420628	475969
33.2	SD10-33.2R-04	SD10-33.5	2420553	475748
33.5	SD10-33.5L-01		2420015	474893
33.5	SD10-33.5L-02		2419828	474974
33.5	SD10-33.5L-03		2419806	474967
33.5	SD10-33.5R-01		2419923	474924
33.5	SD10-33.5R-02		2419851	474956
33.5	SD10-33.5R-03		2419759	474953
33.6	SD10-33.6L-01	SD10-33.6R	2419209	474859
33.6	SD10-33.6L-02		2419166	474820
33.6	SD10-33.6R-01		2419540	474901
33.6	SD10-33.6R-02		2419528	474898
33.6	SD10-33.6R-03		2419167	474728
33.6	SD10-33.6R-04		2419164	474726
33.7	SD10-33.7R-01	SD10-33.7R	2419027	474200
33.7	SD10-33.7R-02		2419099	474191
33.8	SD10-33.8L-01	SD10-33.8R	2419034	473867
33.8	SD10-33.8R-01		2419220	474110
33.9	SD10-33.9R-01	SD10-33.9R	2419026	473622
33.9	SD10-33.9R-02		2419032	473654
33.9	SD10-33.9R-03		2418957	473447

Table 2
MFLBC Fine-Grained Sediment Sub-Sample Location Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

RM	Sediment Point ID	Associated Composite Sample ID	Easting (ft)	Northing (ft)
34.4	SD10-34.4L-01	SD10-34.4L	2416794	472636
34.4	SD10-34.4L-02		2416438	472444
34.4	SD10-34.4L-03		2416445	472377
34.4	SD10-34.4R-01		2416698	472554
34.5	SD10-34.5R-01	SD10-34.5R	2416863	472084
34.6	SD10-34.6L-01	SD10-34.6L	2416831	471898
34.6	SD10-34.6L-02		2416753	471745
34.6	SD10-34.6L-03		2416865	471591
34.8	SD10-34.8R-01	SD10-34.8R	2416796	471277
34.8	SD10-34.8R-02		2416663	470982
34.9	SD10-34.9L-01	SD10-34.9L	2416456	470942
34.9	SD10-34.9L-02		2416434	470921
34.9	SD10-34.9L-03		2416330	470837
34.9	SD10-34.9R-01		2416404	470862
35.1	SD10-35.1L-01	SD10-35.1R	2416472	469907
35.1	SD10-35.1R-01		2416515	470008
35.1	SD10-35.1R-02		2416506	469968
35.1	SD10-35.1R-03		2416506	469921
35.2	SD10-35.2L-01	SD10-35.2L	2416265	469459
35.2	SD10-35.2L-02		2416248	469456
35.2	SD10-35.2R-01		2416190	469422
35.2	SD10-35.2R-02		2416174	469418
35.7	SD10-35.7R-01	SD10-35.7R	2415130	467873
35.9	SD10-35.9R-01	SD10-35.9R	2415354	467376
36.0	SD10-36.0L-01	SD10-36.0L	2415411	467149
36.0	SD10-36.0L-02		2415537	466999
36.0	SD10-36.0L-02		2415417	467048
36.1	SD10-36.1L-01	SD10-36.1L	2415227	466734
36.1	SD10-36.1L-02		2415239	466699
36.2	SD10-36.2R-01	SD10-36.2R	2415362	465995
36.3	SD10-36.3L-01	SD10-36.3L	2415269	465886
36.3	SD10-36.3L-02		2415244	465893
36.3	SD10-36.3L-03		2415168	465955
36.3	SD10-36.3R-01		2415198	465901
36.4	SD10-36.4L-01	SD10-36.4L	2414874	466241
36.4	SD10-36.4L-02		2414820	466234
36.4	SD10-36.4L-03		2414755	466093
36.4	SD10-36.4L-04		2414591	465985
36.4	SD10-36.4R-01		2414787	466088

Table 2
MFLBC Fine-Grained Sediment Sub-Sample Location Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

RM	Sediment Point ID	Associated Composite Sample ID	Easting (ft)	Northing (ft)
36.7	SD10-36.6L-01	SD10-36.6L	2415162	464939
36.7	SD10-36.6L-02		2415181	464856
36.7	SD10-36.6L-03		2415180	464734
36.7	SD10-36.6L-04		2415202	464653
36.7	SD10-36.6L-05		2415202	464599
36.7	SD10-36.6L-06		2415193	464510
36.7	SD10-36.6R-01		2415203	464717
36.7	SD10-36.6R-02		2415231	464635
36.7	SD10-36.6R-03		2415228	464608
37.0	SD10-37.0L-01	SD10-37.0	2415105	463482
37.0	SD10-37.0L-02		2415065	463474
37.0	SD10-37.0L-03		2415023	463445
37.0	SD10-37.0L-04		2414617	463248
37.0	SD10-37.0R-01		2415087	463457
37.0	SD10-37.0R-02		2414820	463394
37.0	SD10-37.0R-03		2414765	463359
37.1	SD10-37.1R-01	SD10-37.1R	2414492	462992
37.2	SD10-37.2L-01	SD10-37.2	2414480	462941
37.2	SD10-37.2L-02		2414486	462892
37.2	SD10-37.2R-01		2414576	462531
37.2	SD10-37.2R-02		2414692	462475
37.3	SD10-37.3R-01	SD10-37.3R	2414711	462412
37.3	SD10-37.3R-02		2414808	462154
37.3	SD10-37.3R-03		2414817	461927
37.3	SD10-37.3R-04		2414832	461879
37.4	SD10-37.4L-01	SD10-37.4R	2414780	461571
37.4	SD10-37.4L-02		2414795	461684
37.4	SD10-37.4L-03		2414775	461450
37.4	SD10-37.4L-04		2414755	461422
37.4	SD10-37.4R-01		2414822	461623
37.5	SD10-37.5L-01	SD10-37.5R	2414717	461112
37.5	SD10-37.5L-02		2414662	461068
37.5	SD10-37.5R-01		2414755	461327
37.5	SD10-37.5R-02		2414704	461093
37.6	SD10-37.6L-01	SD10-37.6	2414571	460502
37.6	SD10-37.6R-01		2414626	460700
37.6	SD10-37.6R-02		2414616	460578
37.6	SD10-37.6R-03		2414557	460454

Coordinates shown are NAD 1983 State Plane, Ohio North.

Table 3
MFLBC Floodplain Soil Sample Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Quarter-Acre Sample	Approximate Area (acres)	Analyzed?	Associated Half-Acre Sample	Approximate Area (acres)	Analyzed?
FPS10-001-01	0.28	NO	FPS10-001	0.61	YES
FPS10-001-02	0.33	NO			
FPS10-002-01	0.31	YES	None	None	Not Collected
FPS10-003-01	0.35	NO	FPS10-003	0.65	YES
FPS10-003-02	0.31	NO			
FPS10-004-01	0.30	NO	FPS10-004	0.60	YES
FPS10-004-02	0.30	NO			
FPS10-005-01	0.25	NO	FPS10-005	0.51	YES
FPS10-005-02	0.26	NO			
FPS10-006-01	0.24	NO	FPS10-006	0.48	YES
FPS10-006-02	0.24	NO			
FPS10-007-01	0.23	NO	FPS10-007	0.48	YES
FPS10-007-02	0.25	NO			
FPS10-008-01	0.25	YES	None	None	Not Collected
FPS10-008-02	0.25	YES			
FPS10-010-01	0.28	NO	FPS10-010	0.54	YES
FPS10-010-02	0.26	NO			
FPS10-011-01	0.26	NO	FPS10-011	0.53	YES
FPS10-011-02	0.27	NO			
FPS10-012-01	0.27	NO	FPS10-012	0.55	YES
FPS10-012-02	0.27	NO			
FPS10-013-01	0.25	NO	FPS10-013	0.48	YES
FPS10-013-02	0.24	NO			
FPS10-014-01	0.26	NO	FPS10-014	0.52	YES
FPS10-014-02	0.25	NO			
FPS10-015-01	0.27	NO	FPS10-015	0.54	YES
FPS10-015-02	0.27	NO			
FPS10-016-01	0.25	NO	FPS10-016	0.51	YES
FPS10-016-02	0.26	NO			
FPS10-017-01	0.25	NO	FPS10-017	0.53	YES
FPS10-017-02	0.28	NO			
FPS10-018-01	0.24	NO	FPS10-018	0.50	YES
FPS10-018-02	0.26	NO			
FPS10-019-01	0.33	NO	FPS10-019	0.64	YES
FPS10-019-02	0.31	NO			
FPS10-020-01	0.32	NO	FPS10-020	0.65	YES
FPS10-020-02	0.33	NO			
FPS10-021-01	0.25	NO	FPS10-021	0.51	YES
FPS10-021-02	0.25	NO			

**MFLBC Floodplain Soil Sample Summary
PDI Technical Memorandum**

Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Quarter-Acre Sample	Approximate Area (acres)	Analyzed?	Associated Half-Acre Sample	Approximate Area (acres)	Analyzed?
FPS10-022-01	0.29	NO	FPS10-022	0.55	YES
FPS10-022-02	0.25	NO			
FPS10-023-01	0.28	NO	FPS10-023	0.56	YES
FPS10-023-02	0.28	NO			
FPS10-024-01	0.32	NO	FPS10-024	0.62	YES
FPS10-024-02	0.31	NO			
FPS10-025-01	0.31	NO	FPS10-025	0.56	NO
FPS10-025-02	0.24	NO			
FPS10-026-01	0.31	NO	FPS10-026	0.50	NO
FPS10-026-02	0.19	NO			
FPS10-027-01	0.26	NO	FPS10-027	0.53	YES
FPS10-027-02	0.27	NO			
FPS10-028-01	0.26	NO	FPS10-028	0.51	YES
FPS10-028-02	0.25	NO			
FPS10-029-01	0.25	NO	FPS10-029	0.50	YES
FPS10-029-02	0.25	NO			
FPS10-030-01	0.25	NO	FPS10-030	0.50	YES
FPS10-030-02	0.25	NO			
FPS10-031-01	0.25	NO	FPS10-031	0.51	YES
FPS10-031-02	0.25	NO			
FPS10-032-01	0.25	NO	FPS10-032	0.49	YES
FPS10-032-02	0.24	NO			
FPS10-033-01	0.25	NO	FPS10-033	0.49	YES
FPS10-033-02	0.24	NO			
FPS10-034-01	0.26	NO	FPS10-034	0.51	YES
FPS10-034-02	0.26	NO			
FPS10-035-01	0.25	NO	FPS10-035	0.50	YES
FPS10-035-02	0.25	NO			
FPS10-036-01	0.26	NO	FPS10-036	0.50	YES
FPS10-036-02	0.24	NO			
FPS10-037-01	0.24	NO	FPS10-037	0.50	YES
FPS10-037-02	0.26	NO			
FPS10-038-01	0.25	NO	FPS10-038	0.50	YES
FPS10-038-02	0.25	NO			
FPS10-039-01	0.25	NO	FPS10-039	0.50	YES
FPS10-039-02	0.25	NO			
FPS10-040-01	0.24	NO	FPS10-040	0.50	YES
FPS10-040-02	0.27	NO			
FPS10-041-01	0.25	NO	FPS10-041	0.51	YES

**MFLBC Floodplain Soil Sample Summary
PDI Technical Memorandum**

Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Quarter-Acre Sample	Approximate Area (acres)	Analyzed?	Associated Half-Acre Sample	Approximate Area (acres)	Analyzed?
FPS10-041-02	0.25	NO	FPS10-041	0.51	YES
FPS10-042-01	0.27	NO	FPS10-042	0.53	YES
FPS10-042-02	0.26	NO			
FPS10-043-01	0.25	NO	FPS10-043	0.51	YES
FPS10-043-02	0.25	NO			
FPS10-044-01	0.25	NO	FPS10-044	0.49	YES
FPS10-044-02	0.24	NO			
FPS10-045-01	0.24	NO	FPS10-045	0.48	YES
FPS10-045-02	0.25	NO			
FPS10-046-01	0.26	NO	FPS10-046	0.51	YES
FPS10-046-02	0.26	NO			
FPS10-047-01	0.23	NO	FPS10-047	0.47	YES
FPS10-047-02	0.24	NO			
FPS10-048-01	0.20	NO	FPS10-048	0.41	YES
FPS10-048-02	0.21	NO			
FPS10-049-01	0.23	NO	FPS10-049	0.47	NO
FPS10-049-02	0.23	NO			
FPS10-050-01	0.24	NO	FPS10-050	0.46	NO
FPS10-050-02	0.23	NO			
FPS10-051-01	0.23	NO	FPS10-051	0.48	NO
FPS10-051-02	0.25	NO			
FPS10-052-01	0.29	NO	FPS10-052	0.59	NO
FPS10-052-02	0.30	NO			
FPS10-053-01	0.26	NO	FPS10-053	0.51	YES
FPS10-053-02	0.25	NO			
FPS10-054-01	0.24	NO	FPS10-054	0.48	YES
FPS10-054-02	0.24	NO			
FPS10-055-01	0.26	NO	FPS10-055	0.54	NO
FPS10-055-02	0.28	NO			
FPS10-056-02	0.23	NO	FPS10-056	0.50	YES
FPS10-056-02	0.23	NO			
FPS10-057-01	0.27	NO	FPS10-057	0.53	YES
FPS10-057-02	0.26	NO			
FPS10-058-01	0.26	NO	FPS10-058	0.52	YES
FPS10-058-02	0.26	NO			
FPS10-059-01	0.26	NO	FPS10-059	0.53	NO
FPS10-059-02	0.27	NO			
FPS10-060-01	0.26	NO	FPS10-060	0.53	NO
FPS10-060-02	0.27	NO			

**MFLBC Floodplain Soil Sample Summary
PDI Technical Memorandum**

Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Quarter-Acre Sample	Approximate Area (acres)	Analyzed?	Associated Half-Acre Sample	Approximate Area (acres)	Analyzed?
FPS10-061-01	0.28	NO	FPS10-061	0.55	NO
FPS10-061-02	0.27	NO			
FPS10-062-01	0.28	NO	FPS10-062	0.54	NO
FPS10-062-02	0.26	NO			
FPS10-063-01	0.32	NO	FPS10-063	0.57	NO
FPS10-063-02	0.26	NO			
FPS10-064-01	0.22	NO	FPS10-064	0.41	NO
FPS10-064-02	0.20	NO			
FPS10-065-01	0.27	NO	FPS10-065	0.52	NO
FPS10-065-02	0.26	NO			
FPS10-066-01	0.25	NO	FPS10-066	0.50	YES
FPS10-066-02	0.25	NO			

Table 4
MFLBC Fish Sample Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

River Mile	Site Name	Date Sampled	Time Sampled	Species	Fish Length (mm)	Fish Weight (g)	Interpreted Age Based on Length/Age Data Provided by Ohio EPA	Length Percentile Based on Ohio EPA State-Wide Fish Sampling Database	Field Weight of Fillet (g)	Field Weight of Offal (g)	Sample IDs F = Fillet O = Offal	Notes	Latitude/ Longitude
12.5	Lisbon Dam	9/13/10	14:25	YB	306	518	>=3yr and <=5yr	>50th%	110	408	FT10-12.5-YB-F, FT10-12.5-YB-O	Only captured one yellow bullhead. Sample was NOT selected for laboratory analysis.	Upstream: N 40°46'38.1" W 80°46'59.1" Downstream: N 40°46'25.8" W 80°46'46.0"
				WS	365	458	>=3yr and <=5yr	>50th%	466	1505	FT10-12.5-WS-F, FT10-12.5-WS-O	-	
				WS	354	405	>=3yr and <=5yr	>50th%					
				WS	349	355	>=3yr and <=5yr	>50th%					
				WS	369	449	>=3yr and <=5yr	>50th%					
				WS	347	415	>=3yr and <=5yr	>50th%					
				CC	442	1700	>5 yr	>50th%	1675	4200 3000	FT10-12.5-CC-F, FT10-12.5-CC-O	Two separate bags of offal from the common carp. First four were females, last one was male.	
				CC	430	2000	>=3yr and <=5yr	>50th%					
				CC	412	1500	>=3yr and <=5yr	>50th%					
				CC	420	1725	>=3yr and <=5yr	>50th%					
				CC	445	1925	>5 yr	>50th%					
32.0	SR 45	9/13/10	18:00	YB	255	238	>=3yr and <=5yr	>50th%	105	352	FT10-32.0-YB-F, FT10-32.0-YB-O	-	Upstream: N 40°58'10.6" W 80°51'31.5" Downstream: N 40°58'9.6" W 80°51'27.7"
				YB	190	97	>=3yr and <=5yr	<25th%					
				YB	215	131	>=3yr and <=5yr	>50th%					
				WS	290	227	<3 yr	>50th%	351	905	FT10-32.0-WS-F, FT10-32.0-WS-O	-	
				WS	302	312	<3 yr	>50th%					
				WS	297	248	<3 yr	>50th%					
				WS	291	249	<3 yr	>50th%					
				WS	303	231	<3 yr	>50th%					
				CC	311	436	>=3yr and <=5yr	25th-50th%	958	3625	FT10-32.0-CC-F, FT10-32.0-CC-O	First was male, two largest were females & above desired size range.	
				CC	479	2175	>5 yr	>50th%					
				CC	521	2275	>5 yr	>50th%					
33.3	Middletown Road	9/14/10	09:15	YB	183	95	<3 yr	<25th%	N/A	95	FT10-33.3-YB-O	Only one yellow bullhead, insufficient tissue to fillet. Submitted as whole body sample, but this sample was NOT selected for laboratory analysis.	Upstream: N 40°57'31.9" W 80°51'59.9" Downstream: N 40°57'32.4" W 80°51'51.4"
				WS	327	343	>=3yr and <=5yr	>50th%	322	924	FT10-33.3-WS-F, FT10-33.3-WS-O	-	
				WS	299	260	<3 yr	>50th%					
				WS	279	279	<3 yr	25th-50th%					
				WS	273	196	<3 yr	25th-50th%					
				WS	266	176	<3 yr	25th-50th%					
				CC	522	2400	>5 yr	>50th%	1525	5225	FT10-33.3-CC-F, FT10-33.3-CC-O	First was female, others male. All above desired size.	
				CC	581	2525	>5 yr	>50th%					
				CC	588	2850	>5 yr	>50th%					
35.4	Colonial Villa	9/14/10	12:00	YB	248	263	>=3yr and <=5yr	>50th%	84	290	FT10-35.4-YB-F, FT10-35.4-YB-O	-	Upstream: N 40°56'31.3" W 80°53'03.8" Downstream: N 40°56'40.1" W 80°52'42.5"
				YB	192	105	>=3yr and <=5yr	<25th%					
				WS	291	232	<3 yr	>50th%	295	810	FT10-35.4-WS-F, FT10-35.4-WS-O	-	
				WS	287	236	<3 yr	25th-50th%					
				WS	272	238	<3 yr	25th-50th%					
				WS	291	248	<3 yr	>50th%					
				WS	272	200	<3 yr	25th-50th%					

Table 4
MFLBC Fish Sample Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

River Mile	Site Name	Date Sampled	Time Sampled	Species	Fish Length (mm)	Fish Weight (g)	Interpreted Age Based on Length/Age Data Provided by Ohio EPA	Length Percentile Based on Ohio EPA State-Wide Fish Sampling Database	Field Weight of Fillet (g)	Field Weight of Offal (g)	Sample IDs F = Fillet O = Offal	Notes	Latitude/ Longitude
12.5	Lisbon Dam	9/13/10	14:25	YB	306	518	>=3yr and <=5yr	>50th%	110	408	FT10-12.5-YB-F, FT10-12.5-YB-O	Only captured one yellow bullhead. Sample was NOT selected for laboratory analysis.	Upstream: N 40°46'38.1" W 80°46'59.1" Downstream: N 40°46'25.8" W 80°46'46.0"
				WS	365	458	>=3yr and <=5yr	>50th%	466	1505	FT10-12.5-WS-F, FT10-12.5-WS-O	-	
				WS	354	405	>=3yr and <=5yr	>50th%					
				WS	349	355	>=3yr and <=5yr	>50th%					
				WS	369	449	>=3yr and <=5yr	>50th%					
				WS	347	415	>=3yr and <=5yr	>50th%					
				CC	442	1700	>5 yr	>50th%	1675	4200 3000	FT10-12.5-CC-F, FT10-12.5-CC-O	Two separate bags of offal from the common carp. First four were females, last one was male.	
				CC	430	2000	>=3yr and <=5yr	>50th%					
				CC	412	1500	>=3yr and <=5yr	>50th%					
				CC	420	1725	>=3yr and <=5yr	>50th%					
CC	445	1925	>5 yr	>50th%									
32.0	SR 45	9/13/10	18:00	YB	255	238	>=3yr and <=5yr	>50th%	105	352	FT10-32.0-YB-F, FT10-32.0-YB-O	-	Upstream: N 40°58'10.6" W 80°51'31.5" Downstream: N 40°58'9.6" W 80°51'27.7"
				YB	190	97	>=3yr and <=5yr	<25th%					
				YB	215	131	>=3yr and <=5yr	>50th%					
				WS	290	227	<3 yr	>50th%	351	905	FT10-32.0-WS-F, FT10-32.0-WS-O	-	
				WS	302	312	<3 yr	>50th%					
				WS	297	248	<3 yr	>50th%					
				WS	291	249	<3 yr	>50th%					
				WS	303	231	<3 yr	>50th%					
				CC	311	436	>=3yr and <=5yr	25th-50th%	958	3625	FT10-32.0-CC-F, FT10-32.0-CC-O	First was male, two largest were females & above desired size range.	
				CC	479	2175	>5 yr	>50th%					
CC	521	2275	>5 yr	>50th%									
33.3	Middletown Road	9/14/10	09:15	YB	183	95	<3 yr	<25th%	N/A	95	FT10-33.3-YB-O	Only one yellow bullhead, insufficient tissue to fillet. Submitted as whole body sample, but this sample was NOT selected for laboratory analysis.	Upstream: N 40°57'31.9" W 80°51'59.9" Downstream: N 40°57'32.4" W 80°51'51.4"
				WS	327	343	>=3yr and <=5yr	>50th%	322	924	FT10-33.3-WS-F, FT10-33.3-WS-O	-	
				WS	299	260	<3 yr	>50th%					
				WS	279	279	<3 yr	25th-50th%					
				WS	273	196	<3 yr	25th-50th%					
				WS	266	176	<3 yr	25th-50th%					
				CC	522	2400	>5 yr	>50th%	1525	5225	FT10-33.3-CC-F, FT10-33.3-CC-O	First was female, others male. All above desired size.	
				CC	581	2525	>5 yr	>50th%					
				CC	588	2850	>5 yr	>50th%					
35.4	Colonial Villa	9/14/10	12:00	YB	248	263	>=3yr and <=5yr	>50th%	84	290	FT10-35.4-YB-F, FT10-35.4-YB-O	-	Upstream: N 40°56'31.3" W 80°53'03.8" Downstream: N 40°56'40.1" W 80°52'42.5"
				YB	192	105	>=3yr and <=5yr	<25th%					
				WS	291	232	<3 yr	>50th%	295	810	FT10-35.4-WS-F, FT10-35.4-WS-O	-	
				WS	287	236	<3 yr	25th-50th%					
				WS	272	238	<3 yr	25th-50th%					
				WS	291	248	<3 yr	>50th%					
				WS	272	200	<3 yr	25th-50th%					

Table 4
MFLBC Fish Sample Summary
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River Mile	Site Name	Date Sampled	Time Sampled	Species	Fish Length (mm)	Fish Weight (g)	Interpreted Age Based on Length/Age Data Provided by Ohio EPA	Length Percentile Based on Ohio EPA State-Wide Fish Sampling Database	Field Weight of Fillet (g)	Field Weight of Offal (g)	Sample IDs F = Fillet O = Offal	Notes	Latitude/ Longitude
36.7	Pine Lake Road	9/14/10	15:30	YB	203	118	>=3yr and <=5yr	25th-50th%	N/A	158	FT10-36.7-YB-O	Too little to filet; composited two fish into a whole body sample.	Upstream: N 40°55'48.3" W 80°52'59.7" Downstream: N 40°55'54.0" W 80°53'00.1"
				YB	153	40	<3 yr	<25th%					
				WS	282	227	<3 yr	25th-50th%	252	742	FT10-36.7-WS-F, FT10-36.7-WS-O	Last fish below desired size limit	
				WS	264	232	<3 yr	25th-50th%					
				WS	266	196	<3 yr	25th-50th%					
				WS	265	212	<3 yr	25th-50th%					
				WS	251	148	<3 yr	<25th%					
37.5	Allen Rd.	9/14/10	17:00	WS	302	358	<3 yr	>50th%	239	715	FT10-37.5-WS-F, FT10-37.5-WS-O	Last three fish below desired size limit	Upstream: N 40°55'12.2" W 80°53'07.4" Downstream: N 40°55'18.6" W 80°53'06.0"
				WS	263	168	<3 yr	25th-50th%					
				WS	230	167	<3 yr	<25th%					
				WS	233	158	<3 yr	<25th%					
				WS	228	125	<3 yr	<25th%					
38.4	WWTP	9/15/10	08:30	WS	242	142	<3 yr	<25th%	150	365	FT10-38.4-WS-F, FT10-38.4-WS-O	All fish below desired size limit	Upstream: N 40°54'40.0" W 80°52'45.8" Downstream: N 40°54'43.8" W 80°52'48.2"
				WS	210	100	<3 yr	<25th%					
				WS	210	94	<3 yr	<25th%					
				WS	198	106	<3 yr	<25th%					
				WS	208	99	<3 yr	<25th%					

Highlighted rows indicate samples that were NOT selected for laboratory analysis.



Table 5
MFLBC Validated Sediment Analytical Results Summary
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Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Parameter						Mirex			Total Organic Carbon			Percent Solids	Gravel Content	Sand Content	Fines Content (Silt + Clay)
Unit						mg/kg			mg/kg			percent	percent	percent	percent
Composite Sample Area	Sample ID	Start Depth (in)	End Depth* (in)	Sample Type	Sample Date	Result	Qual	RL	Result	Qual	RL	Result	Result	Result	Result
SD10-31.1R	SD10-31.1R-0-2	0	2	N	9/8/2010	0.086	J	0.037	15,000		420	58.9	0.0	64.1	35.9
SD10-31.2L	SD10-31.2L-0-4	0	4	N	9/8/2010	0.19	J	0.055	10,000		620	40.3	0.0	69.2	30.8
SD10-31.3R	SD10-31.3R-0-6	0	6	N	9/8/2010	0.026	J	0.0084	4,500		480	52.4	3.0	47.4	49.6
SD10-31.4R	SD10-31.4R-0-6	0	6	N	9/8/2010	0.6	J	0.32	6,300		360	69.2	0.1	61.2	38.7
SD10-31.7L	SD10-31.7L-0-4	0	4	N	9/8/2010	0.08	J	0.037	13,000		420	60.0	0.1	64.1	35.8
SD10-31.8	SD10-31.8-0-4	0	4	N	9/8/2010	0.034	J	0.02	14,000		450	55.8	0.0	54.9	45.1
SD10-31.9C	SD10-31.9C-0-4	0	4	N	9/8/2010	NA			ND	U	330	76.0	NA	NA	NA
SD10-32.0	SD10-32.0-0-6	0	6	N	9/8/2010	0.11	J	0.047	20,000		2700	47.0	0.0	36.7	63.3
SD10-32.0C	SD10-32.0C-0-3	0	3	N	9/8/2010	NA			540	J	330	74.7	NA	NA	NA
SD10-32.1R	SD10-32.1R-0-1	0	1	N	9/9/2010	0.077	J	0.028	32,000		630	39.5	0.5	34.5	65.0
SD10-32.2L	SD10-32.2L-0-1	0	1	N	9/9/2010	0.037	J	0.01	26,000		580	42.9	0.1	22.5	77.4
SD10-32.3L	SD10-32.3L-0-6	0	6	N	9/9/2010	0.056	J	0.023	23,000		530	47.3	0.0	24.5	75.5
SD10-32.9C	SD10-32.9C-0-3	0	3	N	9/9/2010	NA			2,300		360	69.3	NA	NA	NA
SD10-32.9R	SD10-32.9R-0-3	0	3	N	9/9/2010	0.11	J	0.046	9,600		520	48.2	5.6	38.7	55.7
SD10-33.0R	SD10-33.0R-0-2	0	2	N	9/9/2010	0.057	J	0.029	20,000		3400	37.3	3.3	33.8	62.9
SD10-33.1L	SD10-33.1L-0-4	0	4	N	9/9/2010	0.17	J	0.096	29,000		550	45.6	0.0	33.7	66.3
SD10-33.1L	SD10-DUP-01	0	4	FD	9/9/2010	0.25	J	0.1	29,000		570	43.9	0.4	25.6	74.0
SD10-33.2L	SD10-33.2L-0-6	0	6	N	9/13/2010	0.12		0.039	11,000		440	56.4	0.0	50.2	49.8
SD10-33.5	SD10-33.5-0-4	0	4	N	9/13/2010	0.3		0.082	18,000		470	53.6	4.3	57.2	38.5
SD10-33.6R	SD10-33.6R-0-2	0	2	N	9/13/2010	0.56		0.083	15,000		470	52.9	0.0	55.6	44.4
SD10-33.7R	SD10-33.7R-0-3	0	3	N	9/13/2010	0.16	J	0.042	21,000		470	53.0	0.3	46.7	53.0
SD10-33.7R	SD10-DUP2	0	3	FD	9/13/2010	0.041	J	0.0038	16,000		430	58.5	0.0	47.2	52.8
SD10-33.8C	SD10-33.8C-0-2	0	2	N	9/13/2010	0.13		0.057	2,500		330	76.5	0.3	95.9	3.7
SD10-33.8R	SD10-33.8R-0-3	0	3	N	9/13/2010	0.17		0.055	11,000		620	40.3	0.0	30.3	69.7
SD10-33.9R	SD10-33.9R-0-4	0	4	N	9/13/2010	0.26		0.099	27,000		560	44.3	0.0	29.3	70.7
SD10-34.4L	SD10-34.4L-0-3	0	3	N	9/14/2010	0.016		0.0043	16,000		490	50.8	0.0	52.0	48.0
SD10-34.5R	SD10-34.5R-0-7	0	7	N	9/14/2010	ND	U	0.0026	3,000		290	85.7	15.5	35.9	48.6
SD10-34.6L	SD10-34.6L-0-3	0	3	N	9/14/2010	0.19		0.085	17,000		480	51.7	0.1	53.5	46.4
SD10-34.8R	SD10-34.8R-0-3	0	3	N	9/14/2010	0.18		0.093	24,000		530	47.4	0.0	30.8	69.2
SD10-34.9L	SD10-34.9L-0-2	0	2	N	9/14/2010	0.83		0.36	19,000		410	60.6	0.0	57.1	42.9

checked by KEB 07/29/2011



Table 5
MFLBC Validated Sediment Analytical Results Summary
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Parameter						Mirex			Total Organic Carbon			Percent Solids	Gravel Content	Sand Content	Fines Content (Silt + Clay)
Unit						mg/kg			mg/kg			percent	percent	percent	percent
Composite Sample Area	Sample ID	Start Depth (in)	End Depth* (in)	Sample Type	Sample Date	Result	Qual	RL	Result	Qual	RL	Result	Result	Result	Result
SD10-35.1R	SD10-35.1R-0-2	0	2	N	9/14/2010	0.12		0.047	23,000		540	46.3	0.0	45.4	54.6
SD10-35.2L	SD10-35.2L-0-1	0	1	N	9/14/2010	0.17		0.047	23,000		540	46.5	0.4	45.9	53.7
SD10-35.4C	SD10-35.4C-0-4	0	4	N	9/14/2010	1.1		0.3	3,500		340	73.9	1.8	92.9	5.3
SD10-35.7R	SD10-35.7R-0-2	0	2	N	9/15/2010	0.13		0.043	12,000		480	51.8	0.0	59.6	40.4
SD10-35.8R	SD10-35.8R-0-1	0	1	N	9/15/2010	0.21		0.04	14,000		460	54.5	0.4	48.5	51.1
SD10-35.9R	SD10-35.9R-0-2	0	2	N	9/15/2010	0.13		0.056	32,000		640	39.1	0.0	24.7	75.4
SD10-36.0L	SD10-36.0L-0-2	0	2	N	9/15/2010	0.1		0.05	21,000		570	43.9	0.0	39.8	60.2
SD10-36.1C	SD10-36.1C-0-3	0	3	N	9/15/2010	NA			3,200		340	72.5	NA	NA	NA
SD10-36.1L	SD10-36.1L-0-1	0	1	N	9/15/2010	0.069	J	0.029	33,000		670	37.6	0.0	16.3	83.7
SD10-36.1L	SD10-DUP3	0	1	FD	9/15/2010	0.29	J	0.058	34,000		660	38.1	0.0	15.1	84.9
SD10-36.2R	SD10-36.2R-0-1	0	1	N	9/15/2010	0.14		0.042	23,000		480	52.5	0.0	36.7	63.3
SD10-36.3L	SD10-36.3L-0-1	0	1	N	9/15/2010	0.065		0.026	31,000		590	42.2	0.0	27.8	72.2
SD10-36.4L	SD10-36.4L-0-2	0	2	N	9/15/2010	0.12		0.041	17,000		470	53.1	0.0	47.4	52.6
SD10-36.6L	SD10-36.6L-0-2	0	2	N	9/14/2010	0.54		0.087	15,000		490	50.8	0.0	54.8	45.2
SD10-37.0	SD10-37.0-0-2	0	2	N	9/15/2010	0.024		0.009	20,000		510	48.9	0.0	53.0	47.0
SD10-37.1R	SD10-37.1R-0-2	0	2	N	9/15/2010	0.075		0.033	35,000		740	33.7	0.0	15.9	84.1
SD10-37.2	SD10-37.2-0-12	0	12	N	9/15/2010	0.037	J	0.012	35,000		700	35.6	0.0	22.9	77.1
SD10-37.3R	SD10-37.3R-0-6	0	6	N	9/16/2010	0.19		0.065	37,000		740	33.7	0.6	38.4	61.0
SD10-37.4R	SD10-37.4R-0-4	0	4	N	9/16/2010	0.26		0.068	43,000		1600	32.2	0.8	30.0	69.2
SD10-37.5R	SD10-37.5R-0-6	0	6	N	9/16/2010	0.8	J	0.068	48,000		1600	32.2	0.1	15.7	84.2
SD10-37.5R	SD10-DUP4	0	6	FD	9/16/2010	0.35	J	0.067	49,000		1500	32.8	NA	NA	NA
SD10-37.6	SD10-37.6-0-3	0	3	N	9/16/2010	ND	U	0.0047	21,000		540	46.7	0.2	46.5	53.3
SD10-37.6C	SD10-37.6C-0-2	0	2	N	9/16/2010	NA			1,600		350	71.1	NA	NA	NA

Notes:

N = normal

FD = field duplicate

Qual = validated qualifier

RL = laboratory reporting limit

in = inches

mg/kg = milligrams per kilogram

ND = Not Detected

NA = not analyzed - For archived samples that were not analyzed for mirex, TOC was analyzed so that holding times for that parameter could be achieved. Grain size distribution was not analyzed for these samples because there is no holding time limitation.

* End depth specified is the bottom depth of the deepest sub-sample included in the composite sample.

Qualifiers:

U = not detected above RL

J = estimated result

checked by KEB 07/29/2011



Table 6
MFLBC Sediment Bodies Surface Area Summary
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Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

ID	POINT or POLYGON	RIVER MILE	DESCRIPTION	LENGTH (FT)	WIDTH (FT)	ASSOCIATED POLYGON ID	SURFACE AREA (FT ²)	NOTES
SD09-31.1-1	POINT	31.1	Brown/grey sandy SILT, medium gravel, organics, no odor	5	5	NA	25.0	
SD09-31.1-2	POINT	31.1	Brown/grey sandy SILT, medium gravel, organics, no odor	15	5	NA	75.0	
SD10-31.1R-01	POINT	31.1	Sandy SILT with some fine gravel	10	50	NA	500.0	Area covers points 01 through 04
SD10-31.1R-03	POINT	31.1	SILT with some fine sand and gravel	NA	NA	NA	NA	Covered by point 01
SD10-31.1R-04	POINT	31.1	SILT with some fine sand and gravel	NA	NA	NA	NA	Covered by point 01
SD10-31.1R-06	POINT	31.1	Small area behind tree on left	1	1	NA	1.0	
SD10-31.2L-01	POINT	31.2	SILT with some very fine sand	NA	NA	26	NA	
SD10-31.2L-04	POINT	31.2	Emergent	NA	NA	NA	NA	Area data not recorded, minor compared to rest of areas in river mile
SD09-31.3-1	POINT	31.3	Brown SAND, medium gravel, no odor, organics	NA	NA	NA	NA	Not fine-grained sediment body.
SD09-31.3-2	POINT	31.3	Dark brown, SILT, trace sand, organics, no odor	NA	NA	NA	NA	Area data not recorded, minor compared to rest of areas in river mile
SD09-31.3-4	POINT	31.3	Brown/grey SILT, trace sand, no odor	10	2	NA	20.0	
SD09-31.3-5	POINT	31.3	CLAY (appears to be part of formation, not stream sediment)	NA	NA	NA	NA	Not fine-grained sediment body.
SD10-31.3L-03	POINT	31.3	Sandy SILT trace fine gravel	2	12	NA	24.0	
SD10-31.3R-01	POINT	31.3	SILT trace fine sand	30	NA	NA	706.5	circle
SD10-31.3R-02	POINT	31.3	Silty medium SAND	2	2	NA	4.0	
SD10-31.3R-04	POINT	31.3	Small pocket	2	2	NA	4.0	
SD10-31.3R-05	POINT	31.3	SILT with some fine sand	NA	NA	NA	NA	Covered by SD09-31.3-4
SD10-31.3R-06	POINT	31.3	SILT with some fine sand, trace gravel	NA	NA	25	NA	
SD10-31.4R-01	POINT	31.4	SILT and CLAY with some sand	NA	NA	NA	NA	Area data not recorded, minor compared to rest of areas in river mile
SD10-31.4R-02	POINT	31.4	Silty fine SAND trace gravel	2	2	NA	4.0	
SD10-31.4R-03	POINT	31.4	Silty fine SAND	3	3	NA	9.0	
SD10-31.4R-04	POINT	31.4	Sandy SILT	10	20	NA	200.0	
SD09-31.7-1	POINT	31.7	Brown/grey sandy SILT, medium to fine gravel, organics, no odor	NA	NA	22	NA	
SD09-31.7-3	POINT	31.7	Brown/grey sandy SILT, medium to fine gravel, organics, no odor	NA	NA	24	NA	
SD10-31.7L-01	POINT	31.7	Silty fine SAND	3	2	NA	6.0	
SD10-31.7L-03	POINT	31.7	SILT with some fine sand	35	5	NA	NA	Area represents points 03 & 04

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ID	POINT or POLYGON	RIVER MILE	DESCRIPTION	LENGTH (FT)	WIDTH (FT)	ASSOCIATED POLYGON ID	SURFACE AREA (FT ²)	NOTES
SD10-31.7L-04	POINT	31.7	SILT with some fine sand	NA	NA	NA	NA	Covered by point 03
SD10-31.7L-05	POINT	31.7	Sandy SILT	NA	NA	NA	NA	Covered by polygon 23
SD09-31.8-1	POINT	31.8	Brown silty SAND, medium gravel trace organics, no odor	NA	NA	19	NA	Not fine-grained sediment body.
SD09-31.8-2	POINT	31.8	Brown silty SAND, medium gravel, trace organics, no odor	NA	NA	20	NA	Not fine-grained sediment body.
SD10-31.8L-01	POINT	31.8	Silty fine SAND	NA	NA	21	NA	
SD10-31.8L-02	POINT	31.8	Silty fine SAND trace gravel	2	2	NA	4.0	
SD10-31.8L-03	POINT	31.8	SILT with fine sand	15	20	NA	300.0	
SD10-31.8R-01	POINT	31.8	Silty fine SAND trace gravel	3	3	NA	9.0	
SD09-31.9-1	POINT	31.9	Brown silty SAND, medium to fine gravel, no odor	NA	NA	17	NA	Not fine-grained sediment body.
SD09-31.9-2	POINT	31.9	Brown silty SAND, medium gravel trace organics, no odor	NA	NA	18	NA	
SD09-32.0-1	POINT	32.0	Brown fine to medium SAND, medium gravel, no odor	NA	NA	27	NA	Not fine-grained sediment body.
SD09-32.0-2	POINT	32.0	Brown fine silty SAND, some medium gravel, trace organics, no odor	NA	NA	16	NA	
SD10-32.0L-01	POINT	32.0	SILT with some fine sand	2	2	NA	4.0	
SD10-32.0L-02	POINT	32.0	Silty fine SAND	NA	NA	NA	NA	Not a significant fine-grained sediment body.
SD10-32.0R-01	POINT	32.0	SILT trace sand	NA	NA	27	NA	
SD10-32.1R-01	POINT	32.1	SILT with fine sand	6	15	NA	90.0	
SD09-32.2-1	POINT	32.2	Brown/grey SILT, trace sand, medium gravel, some organics, no odor	NA	NA	28	NA	
SD10-32.2L-01	POINT	32.2	SILT WITH TRACE Fine sand	12	NA	NA	113.0	circle
SD09-32.3-1	POINT	32.3	Brown sandy SILT, medium gravel, loose, some organics, no odor	NA	NA	NA	NA	Man-made channel, not fine-grained sediment body.
SD09-32.3-2	POINT	32.3	Grey sandy SILT, loose, some gravel, organics, no odor	NA	NA	NA	NA	Included in sediment body summarized by SD10-32.3L-04
SD10-32.3L-01	POINT	32.3	SILT with some fine sand	12	20	NA	240.0	
SD10-32.3L-02	POINT	32.3	SILT trace fine sand	6	50	NA	300.0	Same as SD10-32.3-L-06, but separate area
SD10-32.3L-03	POINT	32.3	SILT trace fine sand	NA	NA	NA	NA	part of same body as 02
SD10-32.3L-04	POINT	32.3	SILT with some fine sand	50	8	NA	400.0	
SD10-32.3L-06	POINT	32.3	SILT with some fine sand	6	50	NA	300.0	
SD09-32.9-1	POINT	32.9	Brown silty SAND, loose, fine gravel, organics, no odor	NA	NA	NA	NA	Not fine-grained sediment body.

Table 6
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Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

ID	POINT or POLYGON	RIVER MILE	DESCRIPTION	LENGTH (FT)	WIDTH (FT)	ASSOCIATED POLYGON ID	SURFACE AREA (FT ²)	NOTES
SD09-32.9-2	POINT	32.9	Brown/grey sandy SILT, loose, medium to fine gravel, organics, no odor	5	7	NA	35.0	
SD09-32.9-3	POINT	32.9	Grey SILT, trace fine sand, some medium gravel, organics, no odor	10	6	NA	60.0	
SD10-32.9L-02	POINT	32.9	Sandy SILT	1	1	NA	1.0	
SD10-32.9R-01	POINT	32.9	Sandy SILT	3	3	NA	9.0	
SD09-33.0-1	POINT	33.0	Grey loose SILT, with some medium gravel, organics, no odor	10	2	NA	20.0	
SD10-33.0R-01	POINT	33.0	SILT with some fine sand and gravel	1	1	NA	1.0	
SD09-33.1-2	POINT	33.1	Grey SILT, some fine gravel, organics, no odor	2	3	NA	6.0	
SD09-33.1-3	POINT	33.1	Brown/grey SILT, some sand, medium gravel, organics, no odor	NA	NA	NA	NA	Covered by polygon 30
SD10-33.1L-01	POINT	33.1	SILT with some very fine sand	6	6	NA	36.0	
SD10-33.1L-02	POINT	33.1	SILT trace fine sand	3	7.5	NA	22.5	
SD10-33.1L-03	POINT	33.1	SILT trace fine sand	3	7.5	NA	22.5	part of same body as 02
SD10-33.1L-05	POINT	33.1	SILT trace fine sand	NA	NA	NA	NA	Part of polygon 30
SD10-33.1L-06	POINT	33.1	Silty fine SAND	1	1	NA	1.0	
SD09-33.2-1	POINT	33.2	Dark brown, SILT, trace fine sand, some gravel, organics, no odor	5	10	NA	50.0	
SD09-33.2-2	POINT	33.2	Brown sandy SILT, some gravel, organics, no odor	NA	NA	NA	NA	Covered by SD10-33.2L-02
SD09-33.2-3	POINT	33.2	Grey SILT, trace fine sand, no gravel, organics, no odor	NA	NA	NA	NA	Not found in 2010. Covered by other 2010 samples in this river mile.
SD10-33.2L-01	POINT	33.2	Sandy SILT with some fine gravel	NA	NA	NA	NA	Not a significant fine-grained sediment body.
SD10-33.2L-02	POINT	33.2	Sandy SILT with some fine gravel	6	150	NA	900.0	Extends from point 02 to point 05
SD10-33.2L-03	POINT	33.2	Sandy SILT with some fine gravel	NA	NA	NA	NA	Covered by area associated with point 02
SD10-33.2L-04	POINT	33.2	Sandy SILT with some fine gravel	NA	NA	NA	NA	Covered by area associated with point 02
SD10-33.2L-05	POINT	33.2	Sandy SILT with some fine gravel	NA	NA	NA	NA	Covered by area associated with point 02
SD10-33.2L-06	POINT	33.2	Sandy SILT with some fine gravel	NA	NA	NA	NA	Covered by area associated with point 02
SD10-33.2L-08	POINT	33.2	Sandy SILT with some fine gravel	2	2	NA	4.0	small area near bank interpreted as 2 ft square, similar to others.

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ID	POINT or POLYGON	RIVER MILE	DESCRIPTION	LENGTH (FT)	WIDTH (FT)	ASSOCIATED POLYGON ID	SURFACE AREA (FT ²)	NOTES
SD10-33.2R-01	POINT	33.2	Sandy SILT with some gravel	2	60	NA	120.0	Covering from 33.2R-01 to 33.2R-03, 2 ft wide narrow strip
SD10-33.2R-02	POINT	33.2	Sandy SILT with some gravel	NA	NA	NA	NA	Covered by 33.2R-01
SD10-33.2R-03	POINT	33.2	SILT with some fine sand	NA	NA	NA	NA	Covered by 33.2R-01
SD10-33.2R-04	POINT	33.2	SILT with some fine sand	4	20	NA	80.0	misabeled as 32.3
SD10-33.5L-01	POINT	33.5	SILT with some fine sand	8	8	NA	64.0	
SD10-33.5L-02	POINT	33.5	Sandy SILT	5	5	NA	25.0	
SD10-33.5L-03	POINT	33.5	SILT with some fine sand	5	5	NA	25.0	
SD10-33.5R-01	POINT	33.5	SILT with some fine sand and leaves	3	3	NA	9.0	
SD10-33.5R-02	POINT	33.5	Sandy SILT with some fine gravel	1	1	NA	1.0	
SD10-33.5R-03	POINT	33.5	SILT with some fine sand	10	2	NA	20.0	
SD09-33.6-1	POINT	33.6	Grey SILT, medium to fine gravel, organics, no odor	2	2	NA	4.0	
SD10-33.6L-01	POINT	33.6	Sandy SILT	1	1	NA	1.0	
SD10-33.6L-02	POINT	33.6	Silty fine SAND	1	1	NA	1.0	
SD10-33.6R-03	POINT	33.6	SILT with some fine sand	2	4	NA	8.0	
SD10-33.6R-04	POINT	33.6	SILT with some fine sand	1	1	NA	1.0	
SD10-33.7R-01	POINT	33.7	SILT with some fine sand	1	1	NA	1.0	
SD10-33.7R-02	POINT	33.7	SILT with trace fine sand	2	6	NA	12.0	
SD09-33.8-1	POINT	33.8	Brown SILT, trace sand, some medium gravel, organics, no odor	3	3	NA	9.0	
SD09-33.8-2	POINT	33.8	Brown/grey SILT, trace fine sand, medium gravel, organics, no odor	4	7	NA	28.0	
SD10-33.8C-01	POINT	33.8	Fine to medium SAND	3	3	NA	9.0	
SD10-33.8L-01	POINT	33.8	SILT with some fine sand and gravel	4	4	NA	16.0	
SD10-33.8R-01	POINT	33.8	SILT with some fine sand	6	2	NA	12.0	
SD10-33.9R-01	POINT	33.9	SILT with some fine sand	4	10	NA	40.0	
SD10-33.9R-02	POINT	33.9	SILT with some fine sand	4	10	NA	40.0	
SD10-33.9R-03	POINT	33.9	SILT with some fine sand	5	20	NA	100.0	
SD09-34.1-1	POINT	34.1	NA	3	1	NA	3.0	
SD09-34.2-1	POINT	34.2	Brown/grey SILT, trace fine sand, medium gravel, organics, no odor	2	2	NA	4.0	
SD09-34.3-1	POINT	34.3	Brown/grey SILT, fine sand, fine gravel, organics, no odor	10	4	NA	40.0	
SD09-34.4-1	POINT	34.4	Brown/grey SILT, trace fine sand, fine gravel, organics, no odor	3	1	NA	3.0	
SD09-34.4-2	POINT	34.4	Brown/Grey SILT, some trace fine sand, some gravel, some organics, no odor	5	2	NA	10.0	

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SD10-34.4L-02	POINT	34.4	Silty SAND	3	3	NA	9.0	
SD10-34.4L-03	POINT	34.4	SILT with some fine sand	2	2	NA	4.0	
SD10-34.4R-01	POINT	34.4	SILT with some fine sand and gravel	NA	NA	NA	NA	Covered by SD09-34.4-2
SD09-34.5-1	POINT	34.5	Brown/grey sandy SILT, some medium to fine gravel, organics, no odor	10	2	NA	20.0	
SD09-34.5-2	POINT	34.5	Brown/grey sandy SILT, some gravel, organics, no odor	1	1	NA	1.0	
SD10-34.5R-01	POINT	34.5	Silty CLAY with some fine sand and gravel	NA	NA	NA	NA	Not a fine-grained sediment body (CLAY BANK).
SD09-34.6-1	POINT	34.6	Grey SILT, trace sand, some gravel, organics, no odor	5	1	NA	5.0	
SD09-34.6-2	POINT	34.6	Grey/brown SILT, fine sand, no gravel, no organics, no odor	2	2	NA	4.0	
SD09-34.6-3	POINT	34.6	NA	2	2	NA	4.0	
SD09-34.6-4	POINT	34.6	NA	2	2	NA	4.0	
SD10-34.6L-01	POINT	34.6	Sandy SILT with some clay	3	20	NA	60.0	
SD10-34.6L-02	POINT	34.6	SILT with some fine sand	5	10	NA	50.0	
SD10-34.6L-03	POINT	34.6	Silty SAND	3	3	NA	9.0	
SD09-34.8-2	POINT	34.8	Brown/grey MUCK, no gravel, organics, no odor	2	2	NA	4.0	
SD10-34.8R-01	POINT	34.8	SILT with some fine sand	3	20	NA	60.0	
SD10-34.8R-02	POINT	34.8	SILT with trace fine sand	12	20	NA	240.0	
SD09-34.9-2	POINT	34.9	Grey sandy SILT, medium gravel, organics, no odor	3	3	NA	9.0	
SD10-34.9L-01	POINT	34.9	SILT with some fine sand	10	20	NA	200.0	
SD10-34.9L-02	POINT	34.9	Sandy SILT	1	25	NA	25.0	
SD10-34.9L-03	POINT	34.9	SILT with some fine sand	10	0	NA	0.0	Area data not recorded, minor compared to rest of areas in river mile
SD10-34.9R-01	POINT	34.9	Sandy SILT	1	1	NA	1.0	
SD09-35.0-1	POINT	35.0	Deep pool can't be waded across, parts feel soft but may be leaves, will need different method if want to sample.	NA	NA	NA	NA	did not sample
SD09-35.1-1	POINT	35.1	Grey/brown MUCK, no gravel, organics, no odor	5	NA	NA	19.6	circle
SD09-35.1-2	POINT	35.1	Grey/brown sandy SILT, no gravel, organics, no odor	10	3	NA	30.0	
SD10-35.1L-01	POINT	35.1	Sandy SILT	1	1	NA	1.0	
SD10-35.1R-01	POINT	35.1	SILT with some fine sand	3	3	NA	9.0	

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SD10-35.1R-02	POINT	35.1	SILT with some fine sand	12	3	NA	36.0	
SD10-35.1R-03	POINT	35.1	SILT with some fine sand	1	1	NA	1.0	
SD09-35.2-1	POINT	35.2	Dark grey MUCK, no gravel, organics, no odor	1	1	NA	1.0	
SD09-35.2-3	POINT	35.2		3	3	NA	9.0	
SD10-35.2L-01	POINT	35.2	SILT with some fine sand	2	6	NA	12.0	
SD10-35.2L-02	POINT	35.2	SILT with some fine sand	2	6	NA	12.0	continuation of previous
SD10-35.2R-01	POINT	35.2	SILT with some fine sand	3	3	NA	9.0	
SD10-35.2R-02	POINT	35.2	SILT with some fine sand	NA	NA	NA	NA	Covered by SD09-35.2-3
SD09-35.3-1	POINT	35.3	Grey/brown sandy SILT, some medium gravel, no organics, no odor	3	2	NA	6.0	
SD09-35.3-2	POINT	35.3	Grey SILT, some fine gravel, no organics, no odor	3	2	NA	6.0	
SD10-35.3L-01	POINT	35.3	SILT	2	6	NA	12.0	
SD10-35.4C	POINT	35.4		NA	NA	NA	2,270.9	Approximate area associated with composite sample SD10-35.4C
SD10-35.6R-01	POINT	35.6	Sandy SILT	2	2	NA	4.0	
SD09-35.7-1	POINT	35.7	Grey silty fine SAND, no gravel, organics, no odor	2	2	NA	4.0	
SD09-35.7-2	POINT	35.7	Brown/grey silty fine SAND, fine gravel, organics, no odor	1	1	NA	1.0	
SD09-35.7-3	POINT	35.7	Brown/grey silty fine SAND, fine gravel, organics, no odor	10	2	NA	20.0	
SD10-35.7R-01	POINT	35.7	SILT with some fine sand, trace gravel	3	3	NA	9.0	
SD09-35.8-1	POINT	35.8	Grey/brown fine silty SAND, no gravel, no organics, no odor	5	NA	NA	19.6	circle
SD10-35.8R-02	POINT	35.8	Sandy SILT	2	2	NA	4.0	
SD10-35.9R-01	POINT	35.9	SILT with some fine sand	40	10	NA	400.0	
SD09-36.0-1	POINT	36	Brown/Grey silty SAND, medium to fine gravel, organics, no odor	2	7	NA	14.0	
SD09-36.0-2	POINT	36.0	On edge of deep pool, pool bottom mostly cobbles but upstream end has a gravelly sand with some fines, seems finer because loose.	NA	NA	NA	NA	Covered by SD10-36L-02
SD09-36.0-3	POINT	36.0	Brown fine silty SAND, some medium to fine gravel, some organics, no odor	1	1	NA	1.0	
SD10-36.0L-01	POINT	36.0	Silty SAND	NA	NA	NA	NA	Covered by SD09-36.0-1
SD10-36.0L-02	POINT	36.0	SILT with some fine sand	2	7	NA	14.0	
SD09-36.1-1	POINT	36.1	NA	2	2	NA	4.0	
SD09-36.1-2	POINT	36.1	Brown/grey SILT, loose, no gravel, no odor	8	2	NA	16.0	

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SD09-36.1-3	POINT	36.1	Brown/grey SILT, loose, no gravel, no odor	4	2	NA	8.0	
SD10-36.1L-01	POINT	36.1	SILT	3	5	NA	15.0	
SD10-36.1L-02	POINT	36.1	SILT with some fine sand	40	3	NA	120.0	
SD09-36.2-1	POINT	36.2	Grey/brown SILT, trace fine sand, fine gravel, some organics, no odor	2	2	NA	4.0	
SD09-36.2-2	POINT	36.2	Brown/grey SILT, trace fine sand, some fine gravel, no organics, no odor	10	2	NA	20.0	
SD10-36.2R-01	POINT	36.2	SILT with some fine sand	4	10	NA	40.0	
SD09-36.3-1	POINT	36.3	Brown/grey SILT, no gravel, some organics, no odor	3	2	NA	6.0	
SD09-36.3-2	POINT	36.3	Brown/grey SILT, no gravel, some organics, no odor	2	2	NA	4.0	
SD09-36.3-3	POINT	36.3	Brown/grey SILT, no gravel, some organics, no odor	2	3	NA	6.0	
SD09-36.3-4	POINT	36.3	Brown/grey SILT, no gravel, some organics, no odor	NA	NA	NA	NA	Not found in 2010. Covered by other 2010 samples in this river mile.
SD09-36.3-5	POINT	36.3	Brown/grey SILT, no gravel, some organics, no odor	8	1	NA	8.0	
SD10-36.3L-01	POINT	36.3	SILT with some fine sand	2	3	NA	6.0	
SD10-36.3L-02	POINT	36.3	SILT with some fine sand	3	25	NA	75.0	
SD10-36.3L-03	POINT	36.3	SILT with some fine sand	80	3	NA	240.0	
SD10-36.3R-01	POINT	36.3	SILT with some fine sand	6	15	NA	90.0	
SD09-36.4-10	POINT	36.4	Brown/grey SILT, some organics, no gravel, no odor	8	2	NA	16.0	
SD09-36.4-11	POINT	36.4	Grey SILT loose, no gravel, some organics, no odor	30	7	NA	210.0	
SD09-36.4-12	POINT	36.4	aquatic vegetation	8	NA	NA	50.2	circle
SD09-36.4-2	POINT	36.4	Grey SILT, loose, no gravel, some organics, no odor	8	2	NA	16.0	
SD09-36.4-3	POINT	36.4	Brown/grey fine sandy SILT, no gravel, some organics, no odor	3	3	NA	9.0	
SD09-36.4-5	POINT	36.4	Grey SILT loose, no gravel, some organics, no odor	3	3	NA	9.0	
SD09-36.4-6	POINT	36.4	Grey SILT loose, no gravel, some organics, no odor	2	1	NA	2.0	
SD09-36.4-7	POINT	36.4	Grey SILT loose, no gravel, some organics, no odor	NA	NA	NA	NA	Not found in 2010. Covered by other 2010 samples in this river mile.

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SD09-36.4-9	POINT	36.4	Grey SILT loose, no gravel, some organics, no odor	15	2	NA	30.0	
SD10-36.4L-01	POINT	36.4	SILT with trace fine sand	2	3	NA	6.0	
SD10-36.4L-02	POINT	36.4	SILT with some fine sand	2	2	NA	4.0	
SD10-36.4L-03	POINT	36.4	SILT with some fine sand	3	10	NA	30.0	
SD10-36.4L-04	POINT	36.4	SILT with some fine sand	3	15	NA	45.0	
SD10-36.4R-01	POINT	36.4	SILT with some fine sand	5	10	NA	50.0	
SD10-36.6L-01	POINT	36.6	SILT with trace fine sand	2	40	NA	80.0	
SD10-36.6L-02	POINT	36.6	SILT with some fine sand	2	3	NA	6.0	
SD10-36.6L-03	POINT	36.6	SILT with some fine sand	2	10	NA	20.0	
SD10-36.6L-04	POINT	36.6	SILT with some fine sand	2	1	NA	2.0	
SD10-36.6L-05	POINT	36.6	SILT with some fine sand	2	30	NA	60.0	
SD10-36.6L-06	POINT	36.6	SILT with some fine sand	1	2	NA	2.0	
SD10-36.6R-01	POINT	36.6	SILT with some fine sand	2	4	NA	8.0	
SD10-36.6R-02	POINT	36.6	SILT with some fine sand	3	6	NA	18.0	
SD10-36.6R-03	POINT	36.6	SILT with some fine sand	2	4	NA	8.0	
SD09-36.7-1	POINT	36.7	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	1	1	NA	1.0	
SD09-36.7-2	POINT	36.7	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	8	2	NA	16.0	
SD09-36.7-3	POINT	36.7	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	NA	NA	33	NA	
SD09-36.7-4	POINT	36.7	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	12	2	NA	24.0	
SD09-36.8-1	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	2	2	NA	4.0	
SD09-36.8-10	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	5	2	NA	10.0	
SD09-36.8-11	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	5	2	NA	10.0	
SD09-36.8-12	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	25	3	NA	75.0	
SD09-36.8-13	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	8	4	NA	32.0	
SD09-36.8-14	POINT	36.8	Grey/brown SILT, no gravel, some organics, no odor	25	8	NA	200.0	
SD09-36.8-2	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	10	2	NA	20.0	

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SD09-36.8-3	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	10	NA	NA	78.5	circle
SD09-36.8-4	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	12	2	NA	24.0	
SD09-36.8-5	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	5	NA	NA	19.6	circle
SD09-36.8-6	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	8	NA	NA	25.1	semicircle
SD09-36.8-7	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	25	8	NA	200.0	
SD09-36.8-8	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	12	4	NA	48.0	
SD09-36.8-9	POINT	36.8	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	3	3	NA	9.0	
SD09-36.9-1	POINT	36.9	Brown/grey SILT, no gravel, no organics, no odor	12	2	NA	24.0	
SD09-36.9-2	POINT	36.9	Grey/brown sandy SILT, fine gravel, no organics, no odor	2	2	NA	4.0	
SD09-36.9-3	POINT	36.9	Grey/brown SILT, trace fine sand, no gravel, organics, no odor	30	4	NA	105.0	2 areas combined
SD09-36.9-4	POINT	36.9	Grey SILT, no gravel, organics, no odor	3	2	NA	6.0	
SD09-36.9-5	POINT	36.9	Dark Grey MUCK, trace fine sand, no gravel, some organics, no odor	20	3	NA	60.0	
SD09-37.0-1	POINT	37.0	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	20	4	NA	80.0	
SD09-37.0-2	POINT	37.0	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	14	3	NA	46.0	2 areas combined
SD09-37.0-3	POINT	37.0	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	NA	NA	35	NA	
SD09-37.0-4	POINT	37.0	Grey sandy SILT, some fine gravel, no organics, no odor	3	3	NA	9.0	
SD10-37.0L-01	POINT	37.0	SILT with some fine sand	3	25	NA	75.0	
SD10-37.0L-02	POINT	37.0	SILT with some fine sand	5	10	NA	50.0	
SD10-37.0L-03	POINT	37.0	Sandy SILT	3	4	NA	12.0	
SD10-37.0L-04	POINT	37.0	SILT With trace fine sand	NA	NA	37	NA	
SD10-37.0R-01	POINT	37.0	SILT with some fine sand	2	3	NA	6.0	
SD10-37.0R-02	POINT	37.0	SILT with trace fine sand	3	3	NA	9.0	
SD10-37.0R-03	POINT	37.0	SILT with trace fine sand	NA	NA	36	NA	

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SD10-37.1R-01	POINT	37.1	SILT with trace fine sand	NA	NA	NA	770.4	15% coverage of entire RM 37.1 polygon
SD09-37.2-1	POINT	37.2	Grey SILT, trace fine sand, no gravel, no odor	10	4	NA	20.0	50 % covered
SD09-37.2-2	POINT	37.2	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	6	3	NA	18.0	
SD09-37.2-3	POINT	37.2	Brown/Grey sandy SILT, no gravel, organics, no odor	1	1	NA	1.0	
SD09-37.2-4	POINT	37.2	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	5	5	NA	25.0	
SD09-37.2-5	POINT	37.2	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	2	15	NA	30.0	
SD10-37.2L-01	POINT	37.2	SILT with trace fine sand	7	7	NA	49.0	
SD10-37.2L-02	POINT	37.2	SILT with trace fine sand	NA	NA	NA	NA	Not a significant fine-grained sediment body. Covered by other polygons in area.
SD10-37.2R-01	POINT	37.2	SILT with trace sand	NA	NA	42	NA	
SD10-37.2R-02	POINT	37.2	SILT with trace fine sand	NA	NA	NA	NA	Not a fine-grained sediment body (note of odor).
SD09-37.3-1	POINT	37.3	Grey SILT, trace fine sand, fine gravel, organics, no odor	4	4	NA	16.0	
SD09-37.3-2	POINT	37.3	NA	18	175	NA	630.0	20% coverage
SD09-37.3-3	POINT	37.3	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	NA	NA	NA	NA	Replaced by SD10-37.3R-02
SD09-37.3-4	POINT	37.3	Brown/grey sandy SILT, medium to fine gravel, no organics, no odor	4	2	NA	8.0	
SD09-37.3-5	POINT	37.3	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	2	2	NA	4.0	
SD10-37.3R-01	POINT	37.3	SILT with trace fine sand	NA	NA	42	NA	20% coverage
SD10-37.3R-02	POINT	37.3	SILT with trace fine sand	15	5	NA	75.0	
SD10-37.3R-03	POINT	37.3	Sandy SILT	1	10	NA	10.0	
SD09-37.4-1	POINT	37.4	Grey/brown MUCK, no gravel, no organics, no odor	3	5	NA	15.0	
SD10-37.4L-01	POINT	37.4	SILT with trace sand	3	3	NA	9.0	
SD10-37.4L-02	POINT	37.4	Sandy SILT	1	5	NA	5.0	
SD10-37.4L-03	POINT	37.4	SILT with some fine sand	2	4	NA	8.0	
SD10-37.4L-04	POINT	37.4	SILT	NA	NA	NA	NA	Covered by RM 37.5 areas
SD10-37.4R-01	POINT	37.4	SILT with some fine sand	2	3	NA	6.0	
SD09-37.5-1	POINT	37.5	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	40	5	NA	200.0	

Table 6
MFLBC Sediment Bodies Surface Area Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

ID	POINT or POLYGON	RIVER MILE	DESCRIPTION	LENGTH (FT)	WIDTH (FT)	ASSOCIATED POLYGON ID	SURFACE AREA (FT ²)	NOTES
SD09-37.5-2	POINT	37.5	Grey MUCK, no gravel, organics, no odor	4	7	NA	28.0	
SD09-37.5-3	POINT	37.5	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	30	5	NA	150.0	
SD09-37.5-4	POINT	37.5	Grey SILT, trace fine sand, no gravel, no odor	15	3	NA	45.0	
SD10-37.5L-01	POINT	37.5	SILT with trace fine sand	NA	NA	NA	NA	Covered by SD09-37.5-3
SD10-37.5L-02	POINT	37.5	SILT with some fine sand	25	5	NA	125.0	
SD10-37.5R-01	POINT	37.5	SILT with some fine sand	3	25	NA	75.0	
SD10-37.5R-02	POINT	37.5	SILT with some fine sand	25	5	NA	125.0	
SD09-37.6-1	POINT	37.6	Grey/brown SILT, trace fine sand, no gravel, no organics, no odor	35	8	NA	280.0	
SD10-37.6L-01	POINT	37.6	SILT with trace fine sand	2	2	NA	4.0	
SD10-37.6R-01	POINT	37.6	SILT with trace fine sand	3	15	NA	45.0	
SD10-37.6R-02	POINT	37.6	SILT with some fine sand	1	1	NA	1.0	
SD10-37.6R-03	POINT	37.6	SILT with trace fine sand	10	1	NA	10.0	
26	POLYGON	31.2				NA	218.8	
25	POLYGON	31.3				NA	273.7	
22	POLYGON	31.7				NA	282.5	
23	POLYGON	31.7		NA	NA	NA	5.3	
24	POLYGON	31.7				NA	30.9	
21	POLYGON	31.8				NA	71.4	
17	POLYGON	31.9				NA	77.5	
18	POLYGON	31.9				NA	812.2	
16	POLYGON	31.9				NA	311.7	
28	POLYGON	32.2				NA	104.9	
29	POLYGON	32.2		NA	NA	NA	135.0	
27	POLYGON	32				NA	2,420.2	
33	POLYGON	36.7				NA	84.3	
35	POLYGON	37.0	Sediment caught in aquatic vegetation	NA	NA	NA	283.7	
36	POLYGON	37	10% of polygon has fine-grained sediment.			NA	241.9	
37	POLYGON	37	10% of polygon has fine-grained sediment, 70% of polygon is in this river mile.			NA	166.1	
37	POLYGON	37.1	10% of polygon has fine-grained sediment, 30% of polygon is in this river mile.			NA	71.2	
38	POLYGON	37.1	aquatic vegetation	NA	NA	NA	230.0	
39	POLYGON	37.1	aquatic vegetation	NA	NA	NA	245.8	
40	POLYGON	37.1	Silty material under bridge	NA	NA	NA	147.0	
41	POLYGON	37.1	Silty material under bridge	NA	NA	NA	139.2	

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Table 6
MFLBC Sediment Bodies Surface Area Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

933-6154

ID	POINT or POLYGON	RIVER MILE	DESCRIPTION	LENGTH (FT)	WIDTH (FT)	ASSOCIATED POLYGON ID	SURFACE AREA (FT ²)	NOTES
42	POLYGON	37.2				NA	48.4	
43	POLYGON	37.4	Silty aquatic vegetation	NA	NA	NA	260.4	
44	POLYGON	37.4	Silty aquatic vegetation, extends upstream along bank 35 ft, 3 ft wide	NA	NA	NA	410.9	Drawn polygon plus additional 3x35 extension.
45	POLYGON	37.5	Silty aquatic vegetation approx area	NA	NA	NA	374.1	
46	POLYGON	37.6	Area along bank of silty aquatic vegetation. strong organic odor	NA	NA	NA	628.0	
48	POLYGON	37.6	aquatic vegetation	NA	NA	NA	162.7	

NA = Not Applicable.

August 2011

Table 7
MFLBC Mirex SWACs for Sediment
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

933-6154

River Mile Reach	Mirex SWAC (mg/kg)
31.1 - 32.0	0.106
32.1 - 33.0	0.0565
33.1 - 34.0	0.164
34.5 - 35.4	0.899
35.6 - 36.5	0.127
36.7 - 37.6	0.219

Table 8
MFLBC Validated Floodplain Soil Analytical Results Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Parameter				Mirex			Total Organic Carbon			Solids, Percent	Gravel Content	Sand Content	Fines Content (Silt + Clay)
Unit				mg/kg			mg/kg			percent	percent	percent	percent
Composite Sample Location	Sample ID	Sample Type	Sample Date	Result	Qual	RL	Result	Qual	RL	Result	Result	Result	Result
FPS10-001	FPS10-001	N	9/20/2010	0.014		0.0038	16,000	J	440	57.4	0.0	39.0	61.0
FPS10-001	FPS10-001	FD	9/20/2010	0.0086		0.004	12,000	J	450	55.0	NA	NA	NA
FPS10-002-01	FPS10-002-01	N	9/20/2010	0.56		0.03	14,000		340	72.9	1.1	40.6	58.3
FPS10-003	FPS10-003	N	9/20/2010	0.45		0.03	16,000		340	74.0	0.9	51.2	47.9
FPS10-004	FPS10-004	N	9/21/2010	0.51		0.038	22,000		430	58.1	0.0	42.2	57.8
FPS10-005	FPS10-005	N	9/21/2010	0.17		0.048	13,000		550	45.8	0.0	35.3	64.7
FPS10-006	FPS10-006	N	9/21/2010	0.30		0.029	13,000		330	75.3	6.8	52.4	40.8
FPS10-007	FPS10-007	N	9/21/2010	0.60		0.026	8,000		300	83.3	1.1	72.3	26.6
FPS10-008-01	FPS10-008-01	N	9/21/2010	0.090		0.028	11,000		320	77.6	0.9	57.3	41.8
FPS10-008-02	FPS10-008-02	N	9/21/2010	0.0096	J	0.003	16,000		340	74.2	3.0	40.8	56.2
FPS10-010	FPS10-010	N	9/22/2010	0.17		0.029	17,000		330	76.7	0.0	67.2	32.8
FPS10-011	FPS10-DUP-H-02	FD	9/22/2010	0.28	J	0.03	13,000		340	74.4	NA	NA	NA
FPS10-011	FPS10-DUP-H-02	N	9/22/2010	0.71	J	0.03	17,000		340	73.2	0.4	61.3	38.3
FPS10-012	FPS10-012	N	9/23/2010	1.1		0.029	14,000		330	75.8	0.1	50.7	49.2
FPS10-013	FPS10-013	N	9/28/2010	0.69	J	0.035	8,100		400	62.6	0.5	27.2	72.3
FPS10-013	FPS10-013	FD	9/28/2010	1.1	J	0.03	8,700		340	72.7	NA	NA	NA
FPS10-014	FPS10-014	N	9/28/2010	0.75		0.032	2,800		370	67.9	0.4	33.1	66.5
FPS10-015	FPS10-015	N	9/28/2010	0.45	J	0.038	4,600		430	58.1	0.0	30.8	69.2
FPS10-016	FPS10-016	N	9/28/2010	0.88	J	0.034	4,800		380	65.4	0.0	29.0	71.0
FPS10-017	FPS10-017	N	9/28/2010	0.95	J	0.031	4,300		360	69.9	0.0	41.8	58.2
FPS10-018	FPS10-018	N	9/29/2010	0.17		0.028	3,500		320	78.2	0.8	53.2	46.0
FPS10-018	FPS10-018	FD	9/29/2010	0.23	J	0.028	4,700		320	77.6	NA	NA	NA
FPS10-019	FPS10-019	N	9/29/2010	0.68		0.028	5,000		320	79.1	6.7	49.1	44.2
FPS10-020	FPS10-020	N	9/29/2010	1.3		0.029	4,600		330	75.4	0.0	36.1	63.9
FPS10-021	FPS10-021	N	9/29/2010	0.88		0.029	4,900		340	74.6	0.0	32.9	67.1
FPS10-022	FPS10-022	N	9/29/2010	1.3		0.027	3,900		310	81.2	3.2	47.1	49.7
FPS10-023	FPS10-023	N	9/30/2010	0.13		0.037	25,000		850	58.8	0.8	39.9	59.3
FPS10-024	FPS10-024	N	9/30/2010	0.18		0.032	28,000		730	68.4	0.0	31.6	68.4
FPS10-027	FPS10-027	N	9/30/2010	0.10		0.039	29,000		880	56.8	0.0	24.9	75.1
FPS10-028	FPS10-028	N	9/30/2010	0.010		0.0041	5,600		930	53.7	0.0	26.7	73.3
FPS10-029	FPS10-029	N	10/1/2010	0.73		0.027	22,000		620	80.7	0.9	23.3	75.8
FPS10-030	FPS10-030	N	10/1/2010	0.30	J	0.03	18,000		680	73.5	2.9	34.2	62.9
FPS10-030	FPS10-030	FD	10/1/2010	0.83	J	0.029	21,000		670	75.0	NA	NA	NA
FPS10-031	FPS10-031	N	10/1/2010	0.42	J	0.029	27,000		660	75.5	0.0	15.1	84.9

checked by KEB 07/29/2011



Table 8
MFLBC Validated Floodplain Soil Analytical Results Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Parameter				Mirex			Total Organic Carbon			Solids, Percent	Gravel Content	Sand Content	Fines Content (Silt + Clay)
Unit				mg/kg			mg/kg			percent	percent	percent	percent
Composite Sample Location	Sample ID	Sample Type	Sample Date	Result	Qual	RL	Result	Qual	RL	Result	Result	Result	Result
FPS10-032	FPS10-032	N	10/1/2010	0.74		0.028	20,000		630	79.1	0.0	41.4	58.6
FPS10-033	FPS10-033	N	10/1/2010	0.59		0.03	30,000		690	72.7	0.0	13.7	86.3
FPS10-034	FPS10-034	N	10/1/2010	1.1		0.028	26,000		640	77.7	0.0	25.2	74.8
FPS10-035	FPS10-035	N	10/2/2010	0.11		0.029	5,800		330	75.6	0.7	31.3	68.0
FPS10-035	FPS10-035	FD	10/2/2010	0.17		0.029	6,900		330	75.7	NA	NA	NA
FPS10-036	FPS10-036	N	10/2/2010	0.79	J	0.029	7,500		330	75.2	0.0	34.0	66.0
FPS10-037	FPS10-037	N	10/2/2010	0.44	J	0.03	5,900		350	72.3	0.0	27.2	72.8
FPS10-038	FPS10-038	N	10/2/2010	0.47	J	0.026	4,600		300	84.7	0.0	53.1	46.9
FPS10-039	FPS10-039	N	10/3/2010	0.65		0.029	3,700		320	77.0	0.0	58.6	41.4
FPS10-040	FPS10-040	N	10/3/2010	0.36		0.03	5,100		340	73.8	1.6	48.1	50.3
FPS10-041	FPS10-041	N	10/4/2010	1.1		0.035	1,900	J	400	62.8	0.0	24.6	75.4
FPS10-042	FPS10-042	N	10/4/2010	0.22		0.0067	NA			65.8	0.2	28.0	71.8
FPS10-043	FPS10-043	N	10/4/2010	0.28		0.007	NA			62.8	0.0	14.3	85.7
FPS10-044	FPS10-DUP9	FD	10/4/2010	0.62	J	0.037	1,100	J	420	59.4	NA	NA	NA
FPS10-044	FPS10-DUP9	N	10/4/2010	0.67	J	0.038	1,200	J	440	57.3	0.0	10.3	89.7
FPS10-045	FPS10-045	N	10/4/2010	1.4		0.03	1,100	J	340	73.4	0.0	25.1	74.9
FPS10-046	FPS10-046	N	10/4/2010	0.91		0.034	1,100	J	380	65.2	0.0	15.4	84.6
FPS10-047	FPS10-047	N	10/5/2010	0.60	J	0.03	920	J	350	72.2	NA	NA	NA
FPS10-048	FPS10-048	N	10/5/2010	0.57	J	0.03	4,200		340	72.9	0.5	42.1	57.4
FPS10-053	FPS10-053 FD	FD	3/28/2011	0.71	J	0.33	33,000		1800	67.7	NA	NA	NA
FPS10-053	FPS10-053 FD	N	3/28/2011	0.74	J	0.34	31,000		1900	65.0	0.0	16.1	83.9
FPS10-054	FPS10-054	N	3/29/2011	0.97		0.15	34,000	J	1700	72.6	0.0	39.1	60.9
FPS10-056	FPS10-056	N	3/29/2011	0.47	J	0.16	7,900	J	360	69.7	1.0	24.6	74.4
FPS10-057	FPS10-057	N	3/29/2011	0.98	J	0.31	17,000	J	350	71.2	0.0	32.9	67.1
FPS10-057	FPS10-057	FD	3/29/2011	1.0	J	0.31	19,000	J	1800	70.9	NA	NA	NA
FPS10-058	FPS10-058	N	3/29/2011	0.73	J	0.31	32,000	J	1700	72.1	0.0	39.0	61.0
FPS10-066	FPS10-066	N	3/31/2011	0.14		0.032	39,000	J	1800	69.3	0.0	36.5	63.5

Notes:

N = normal

FD = field duplicate

Qual = validated qualifier

RL = laboratory reporting limit

mg/kg = milligrams per kilogram

NA = not analyzed (Grain size distribution was not analyzed for duplicate samples.)

Qualifiers:

J = estimated result

checked by KEB 07/29/2011



Table 9
MFLBC Fish Tissue Analytical Results Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Sample ID	Species	Parameter Unit	Mirex			Percent Lipids
			mg/kg			%
		Type	Result	Qual	RL	Result
FT10-12.5-CC-F	Common Carp	Fillet	0.121		0.0497	3.31
FT10-12.5-CC-O	Common Carp	Offal	0.444		0.193	8.69
FT10-12.5-WS-F	White Sucker	Fillet	0.0582		0.0298	0.437
FT10-12.5-WS-O	White Sucker	Offal	0.189		0.0996	1.18
FT10-32.0-CC-F	Common Carp	Fillet	0.516		0.194	1.15
FT10-32.0-CC-O	Common Carp	Offal	1.300		0.498	3.65
FT10-32.0-WS-F	White Sucker	Fillet	0.286		0.0994	0.785
FT10-32.0-WS-O	White Sucker	Offal	1.470		0.499	3.43
FT10-32.0-YB-F	Yellow Bullhead	Fillet	0.324		0.0998	1.23
FT10-32.0-YB-O	Yellow Bullhead	Offal	1.650		0.497	5.58
FT10-33.3-CC-F	Common Carp	Fillet	1.220		0.498	1.53
FT10-33.3-CC-O	Common Carp	Offal	3.380		0.991	5.17
FT10-33.3-WS-F	White Sucker	Fillet	0.130		0.0492	0.640
FT10-33.3-WS-O	White Sucker	Offal	1.020		0.484	3.18
FT10-35.4-WS-F	White Sucker	Fillet	0.151		0.0997	0.788
FT10-35.4-WS-O	White Sucker	Offal	0.889		0.497	3.65
FT10-35.4-YB-F	Yellow Bullhead	Fillet	0.200		0.0995	0.666
FT10-35.4-YB-O	Yellow Bullhead	Offal	1.270		0.499	4.59
FT10-36.7-WS-F	White Sucker	Fillet	0.194		0.0964	0.888
FT10-36.7-WS-O	White Sucker	Offal	1.420		0.489	4.63
FT10-36.7-YB-O	Yellow Bullhead	Whole Body	0.744		0.249	4.18
FT10-37.5-WS-F	White Sucker	Fillet	0.0581		0.0196	1.20
FT10-37.5-WS-O	White Sucker	Offal	0.341		0.200	6.01
FT10-38.4-WS-F	White Sucker	Fillet	ND	U	0.0099	1.38
FT10-38.4-WS-O	White Sucker	Offal	ND	U	0.0099	4.47

Notes:

Qual = laboratory qualifier

RL = laboratory reporting limit

mg/kg = milligrams per kilogram

ND = Not Detected

Qualifiers:

U = not detected above RL

Checked by KEB 7/29/2011

Table 10
MFLBC Fish Tissue Sample Weight Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Sample ID	Fillet / Offal	Ohio EPA Lab Weight (g)	Field-Measured Weight (g)
FT10-12.5-CC-F	Fillet	1670	1675
FT10-12.5-CC-O	Offal	6926	7200
FT10-12.5-WS-F	Fillet	444	466
FT10-12.5-WS-O	Offal	1498	1505
FT10-32.0-CC-F	Fillet	908	958
FT10-32.0-CC-O	Offal	4004	3625
FT10-32.0-WS-F	Fillet	336	351
FT10-32.0-WS-O	Offal	894	905
FT10-32.0-YB-F	Fillet	22	105
FT10-32.0-YB-O	Offal	152	352
FT10-33.3-CC-F	Fillet	1134	1525
FT10-33.3-CC-O	Offal	3848	5225
FT10-33.3-WS-F	Fillet	292	322
FT10-33.3-WS-O	Offal	890	924
FT10-35.4-WS-F	Fillet	286	295
FT10-35.4-WS-O	Offal	814	810
FT10-35.4-YB-F	Fillet	80	84
FT10-35.4-YB-O	Offal	287	290
FT10-36.7-WS-F	Fillet	102	252
FT10-36.7-WS-O	Offal	314	742
FT10-36.7-YB-O	Offal	156	158
FT10-37.5-WS-F	Fillet	224	239
FT10-37.5-WS-O	Offal	686	715
FT10-38.4-WS-F	Fillet	142	150
FT10-38.4-WS-O	Offal	370	365

Significant reductions in "lab" weight as compared to the field-measured weight in highlighted rows are due to analysis of split samples by Test America. Ohio EPA Lab weights were used in the calculation of whole body concentrations. TestAmerica data are not relied upon in this report.

For samples FT10-33.3-YB-O and FT10-36.7-YB-O, the samples were collected as Whole Body composites because there was insufficient tissue to fillet.

MFLBC Fish Tissue Calculated Whole Body Results
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Whole Body Sample	Whole-Body Mirex (mg/kg)	Whole-Body %Lipids	Mirex Whole Body-To- Fillet Ratio	Lipids Whole Body-To- Fillet Ratio
FT10-12.5-WS	0.159	1.0	2.73	2.31
FT10-12.5-CC	0.381	7.6	3.15	2.31
FT10-32.0-YB	1.48	5.0	4.58	4.09
FT10-32.0-WS	1.15	2.7	4.01	3.45
FT10-32.0-CC	1.16	3.2	2.24	2.77
FT10-33.3-WS	0.800	2.6	6.15	3.99
FT10-33.3-CC	2.89	4.3	2.37	2.84
FT10-35.4-YB	1.04	3.7	5.18	5.61
FT10-35.4-WS	0.697	2.9	4.62	3.69
FT10-36.7-WS	1.12	3.7	5.77	4.18
FT10-37.5-WS	0.271	4.8	4.67	4.02
FT10-38.4-WS	ND (< 0.0099)	3.6	N/A	2.62
FT10-36.7-YB	0.744	4.2	No Fillet Analyzed	No Fillet Analyzed

LEGEND

- RIVER MILE POINT
- FEEDER CREEK
- MFLBC

**Middle Fork
Little Beaver Creek**

**Former
Nease
Facility**

**Feeder
Creek**

Stratton Rd

Middletown Rd

SR 165

W Pine Lake Rd

Goshen Rd

SR 14

Allen Rd

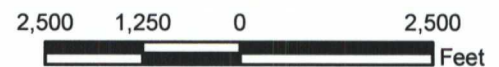
Beechwood Rd



REGIONAL SETTING

REFERENCE

1.) AERIAL PHOTOGRAPH FROM SPRING 2006 PROVIDED BY OHIO EPA.



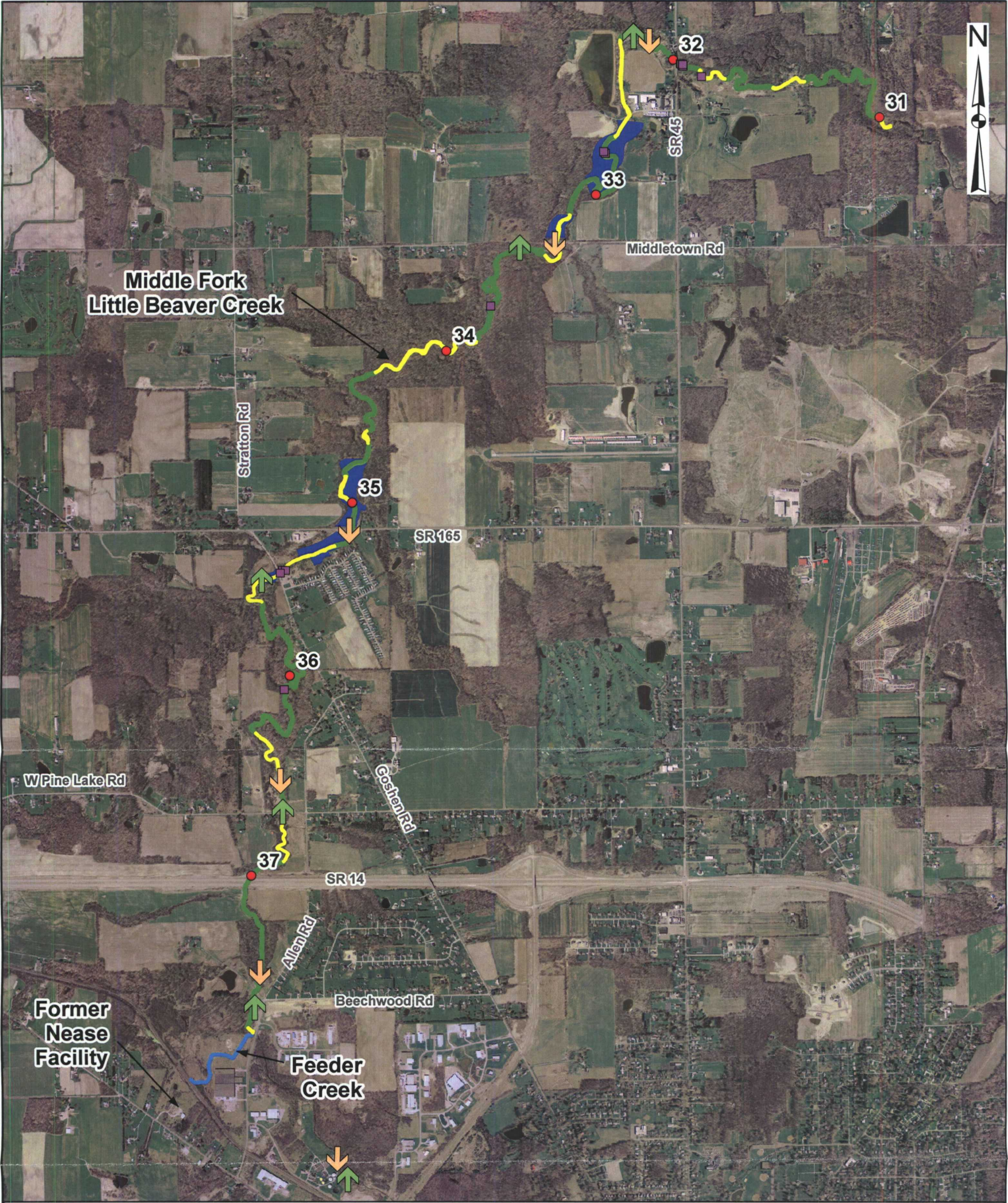
SCALE	AS SHOWN
DATE	08/01/11
DESIGN	PSF
GIS	APJ
CHECK	APJ
REVIEW	PSF

OPERABLE UNIT 3 LOCATION MAP

FILE No.	9336154ZE01		
PROJECT No.	9336154	REV.	0

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FIGURE **1**



LEGEND

- COARSE-GRAINED SEDIMENT SAMPLE LOCATION
- DOWNSTREAM END OF FISH SAMPLING REACH (APPROX.)
- UPSTREAM END OF FISH SAMPLING REACH (APPROX.)
- RIVER MILE POINT
- SEDIMENT SAMPLING AREA
- MFLBC
- FLOODPLAIN SOIL SAMPLE
- FEEDER CREEK

NOTE

1.) FISH TISSUE SAMPLES WERE ALSO COLLECTED DOWNSTREAM AT RM 12.5 NEAR LISBON DAM.

REFERENCE

1.) AERIAL PHOTOGRAPH FROM SPRING 2006 PROVIDED BY OHIO EPA.

FIGURE 2

PROJECT No.	933-6154
FILE No.	9336154ZE02
REV. 1	SCALE: AS SHOWN
DESIGN	APJ 08/01/11
GIS	AM 08/01/11
CHECK	APJ 08/01/11
REVIEW	PSF 08/01/11

OVERALL
PDI SAMPLING PROGRAM

PROJECT

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Path: V:\Projects\19931933-6154\REPORT_FILES\REPORT_0154\Technical-Memo\WMD\9336154ZE03.mxd



LEGEND

- RIVER MILE POINT
- COARSE-GRAINED SEDIMENT SAMPLE LOCATION
- 2009 RECONNAISSANCE - SEDIMENT DESCRIPTION RECORDED
- 2010 FINE-GRAINED SEDIMENT SUB-SAMPLE LOCATION
- X OBSTRUCTION
- 📷 PHOTOGRAPH LOCATION
- FINE-GRAINED SEDIMENT COMPOSITE SAMPLE LOCATION
- MFLBC

NOTES

- 1.) SEE APPENDIX A FOR PHOTOGRAPHS TAKEN AT EACH PHOTOGRAPH LOCATION.
- 2.) CLUSTERED COARSE-GRAINED SAMPLE LOCATIONS WERE COMPOSITED INTO A SINGLE SAMPLE.
- 3.) "RIVER MILE POINT" LOCATIONS REPRESENT THE DIVIDE BETWEEN ADJACENT COMPOSITE SAMPLE AREAS.



REFERENCE

- 1.) AERIAL PHOTOGRAPH FROM SPRING 2006 PROVIDED BY OHIO EPA.



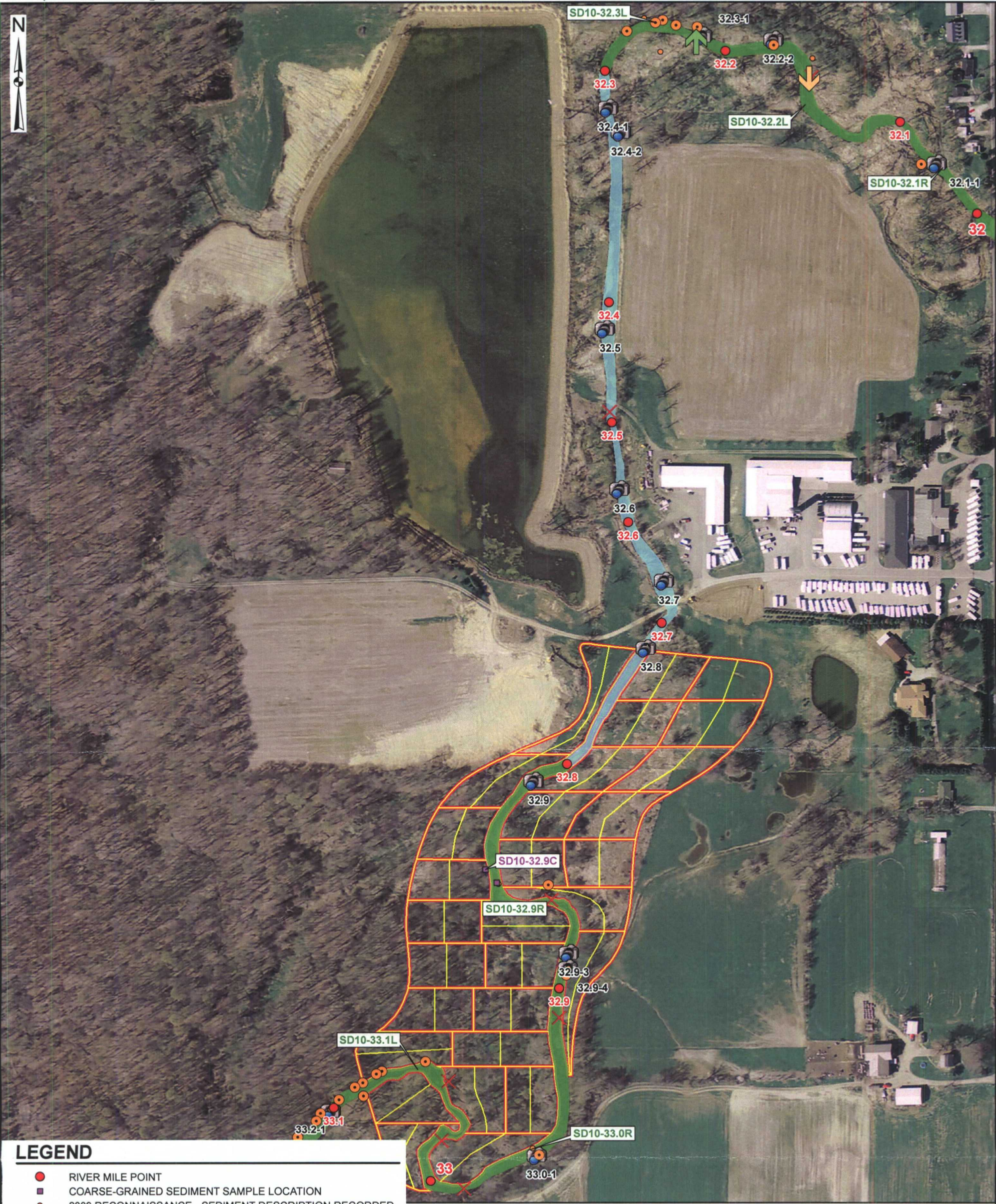
FILE No.	9336154ZE03
PROJECT No.	933-6154
REV.	0

SCALE	AS SHOWN
DATE	08/01/11
DESIGN	APJ
GIS	AM
CHECK	APJ
REVIEW	PSF

SEDIMENT SAMPLING AREAS RIVER MILE 31.0-32.0

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FIGURE
3



LEGEND

- RIVER MILE POINT
- COARSE-GRAINED SEDIMENT SAMPLE LOCATION
- 2009 RECONNAISSANCE - SEDIMENT DESCRIPTION RECORDED
- 2010 FINE-GRAINED SEDIMENT SUB-SAMPLE LOCATION
- OBSTRUCTION
- PHOTOGRAPH LOCATION
- FINE-GRAINED SEDIMENT COMPOSITE SAMPLE LOCATION
- MFLBC
- QUARTER ACRE AREA
- OU-3 PDI FLOODPLAIN SOIL SAMPLE - HALF ACRE AREA
- DOWNSTREAM END OF FISH SAMPLING REACH (APPROX.)
- UPSTREAM END OF FISH SAMPLING REACH (APPROX.)

NOTE

- SEE FIGURE 10 FOR FLOODPLAIN SOIL SAMPLING DETAILS.
- SEE APPENDIX A FOR PHOTOGRAPHS TAKEN AT EACH PHOTOGRAPH LOCATION.
- CLUSTERED COARSE-GRAINED SAMPLE LOCATIONS WERE COMPOSITED INTO A SINGLE SAMPLE.
- "RIVER MILE POINT" LOCATIONS REPRESENT THE DIVIDE BETWEEN ADJACENT

REFERENCE

- AERIAL PHOTOGRAPH FROM SPRING 2006 PROVIDED BY OHIO EPA.



FIGURE 4

REVIEW	CHECK	DESIGN	REV. 0	FILE NO.	PROJECT NO.	TITLE
PSF	AM	APJ	AS SHOWN	9336154ZE04	933-6154	SEDIMENT SAMPLING AREAS RIVER MILE 32.1-33.0
08/01/11	08/01/11	08/01/11				

SEDIMENT SAMPLING AREAS
RIVER MILE 32.1-33.0

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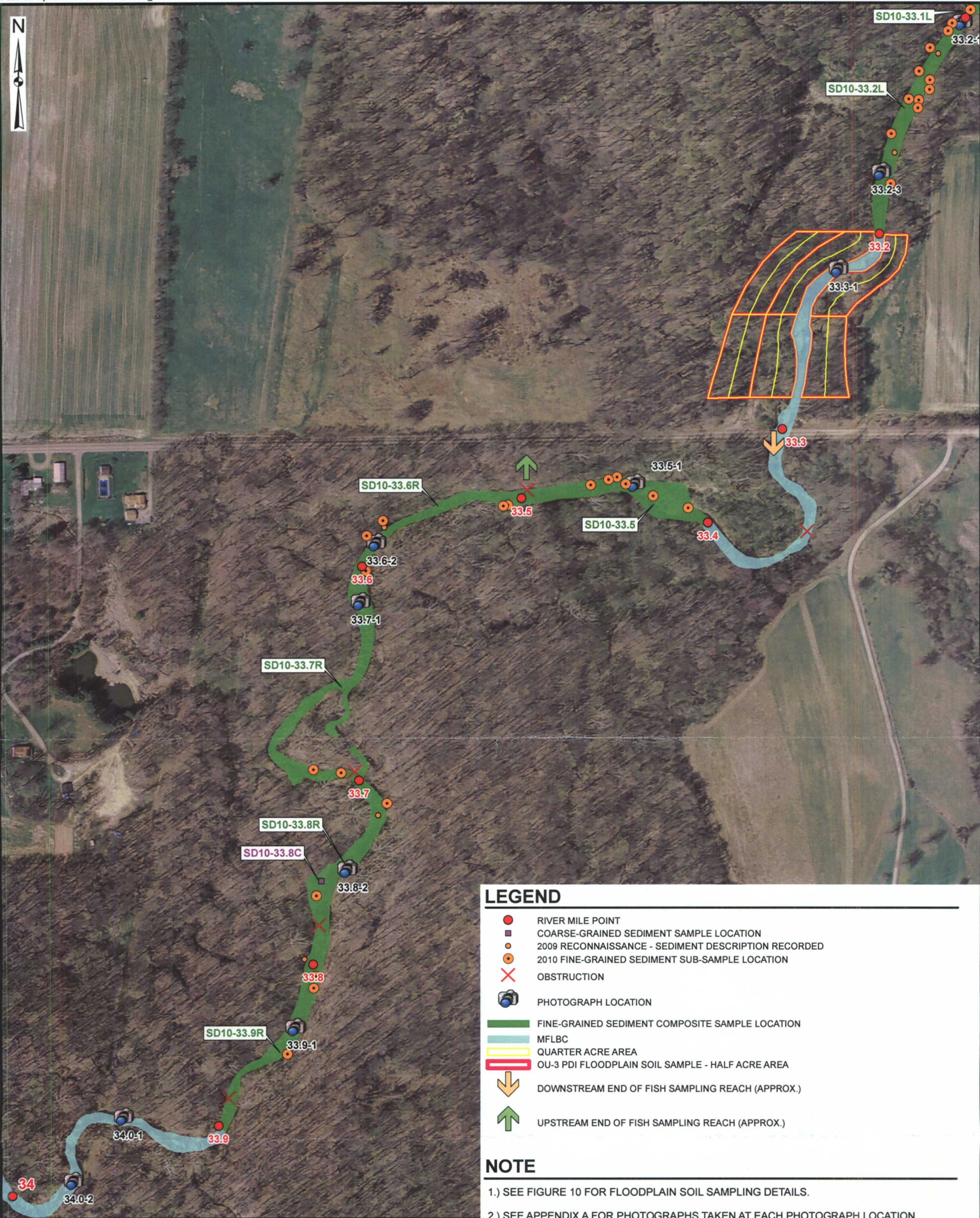


FIGURE 5

REVIEW	CHECK	DESIGN	FILE NO.	PROJECT NO.	TITLE
PSF	APJ	AM	9336154ZE05	933-6154	SEDIMENT SAMPLING AREAS RIVER MILE 33.1-34.0
08/01/11	08/01/11	08/01/11	AS SHOWN		

PROJECT

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NOTE

- 1.) SEE FIGURE 11 FOR FLOODPLAIN SOIL SAMPLING DETAILS.
- 2.) SEE APPENDIX A FOR PHOTOGRAPHS TAKEN AT EACH PHOTOGRAPH LOCATION.
- 3.) CLUSTERED COARSE-GRAINED SAMPLE LOCATIONS WERE COMPOSITED INTO A SINGLE SAMPLE.
- 4.) "RIVER MILE POINT" LOCATIONS REPRESENT THE DIVIDE BETWEEN ADJACENT COMPOSITE SAMPLE AREAS.

REFERENCE

- 1.) AERIAL PHOTOGRAPH FROM SPRING 2006 PROVIDED BY OHIO EPA.



LEGEND

- RIVER MILE POINT
- 2009 RECONNAISSANCE - SEDIMENT DESCRIPTION RECORDED
- 2010 FINE-GRAINED SEDIMENT SUB-SAMPLE LOCATION
- OBSTRUCTION
- PHOTOGRAPH LOCATION
- FINE-GRAINED SEDIMENT COMPOSITE SAMPLE LOCATION
- MFLBC
- QUARTER ACRE AREA
- OU-3 PDI FLOODPLAIN SOIL SAMPLE - HALF ACRE AREA

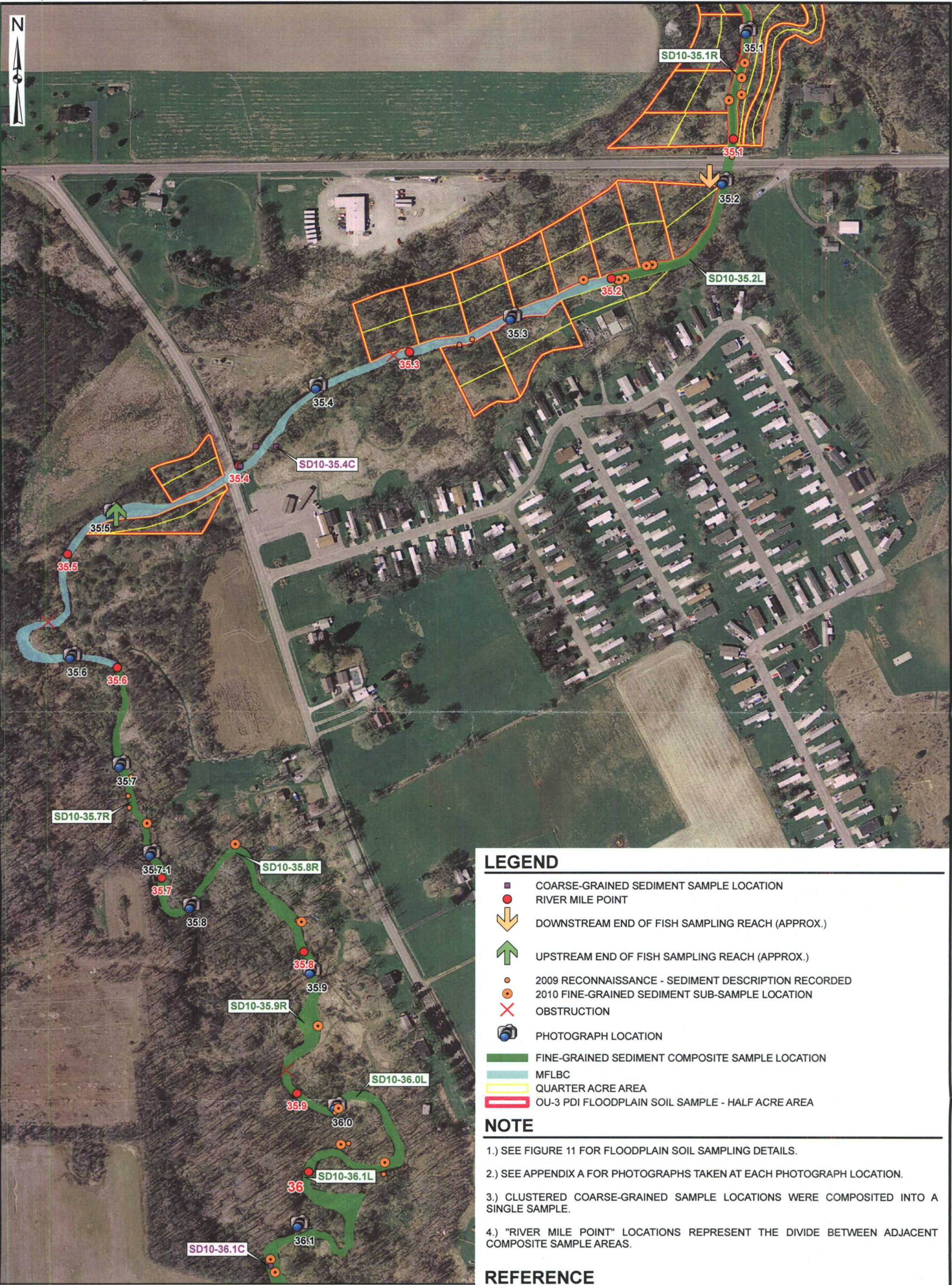
FIGURE 6

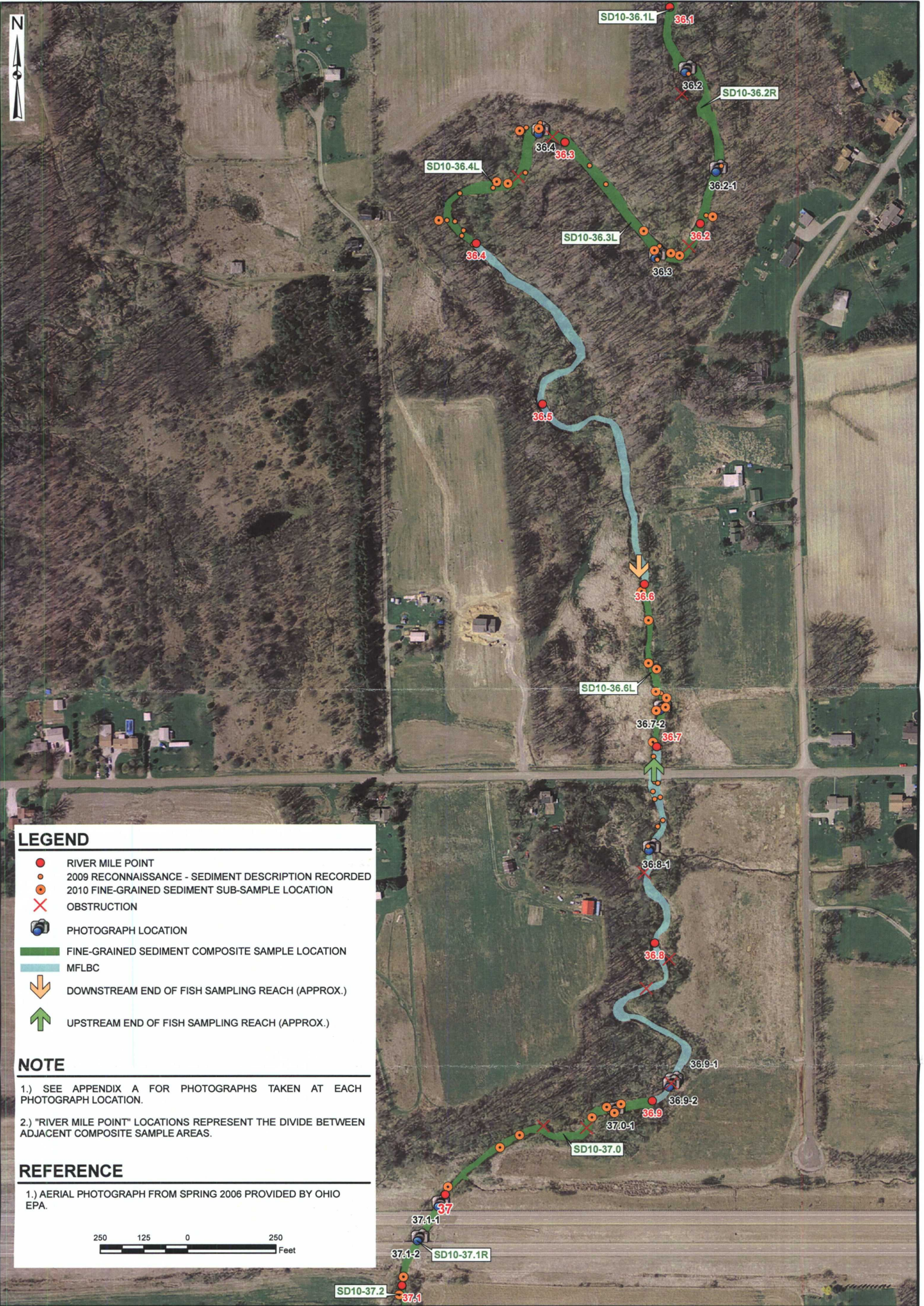
REVIEW	CHECK	GIS	DESIGN	REV. 0	FILE NO.	PROJECT No.	TITLE
PSF	AM	APJ	AS SHOWN	08/01/11	9336154ZE06	933-6154	SEDIMENT SAMPLING AREAS RIVER MILE 34.1-35.0
08/01/11	08/01/11	08/01/11					

PROJECT

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LEGEND

- RIVER MILE POINT
- 2009 RECONNAISSANCE - SEDIMENT DESCRIPTION RECORDED
- 2010 FINE-GRAINED SEDIMENT SUB-SAMPLE LOCATION
- OBSTRUCTION
- PHOTOGRAPH LOCATION
- FINE-GRAINED SEDIMENT COMPOSITE SAMPLE LOCATION
- MFLBC
- DOWNSTREAM END OF FISH SAMPLING REACH (APPROX.)
- UPSTREAM END OF FISH SAMPLING REACH (APPROX.)

NOTE

- SEE APPENDIX A FOR PHOTOGRAPHS TAKEN AT EACH PHOTOGRAPH LOCATION.
- "RIVER MILE POINT" LOCATIONS REPRESENT THE DIVIDE BETWEEN ADJACENT COMPOSITE SAMPLE AREAS.

REFERENCE

- AERIAL PHOTOGRAPH FROM SPRING 2006 PROVIDED BY OHIO EPA.



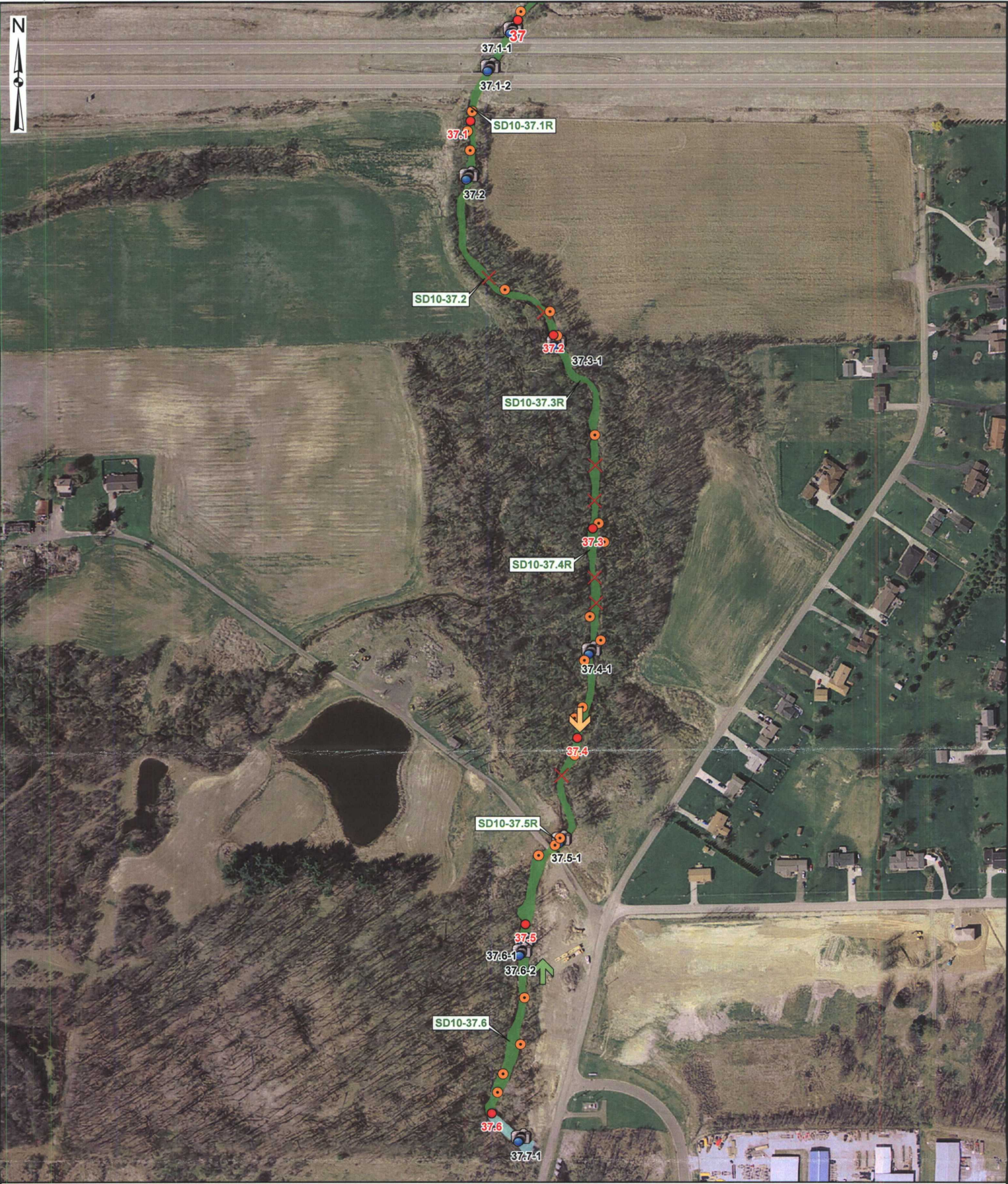
FIGURE 8

PROJECT No.	933-6154
FILE No.	9336154ZE08
REV. 0	SCALE: AS SHOWN
DESIGN	APJ 08/01/11
GIS	AM 08/01/11
CHECK	APJ 08/01/11
REVIEW	PSF 08/01/11

TITLE	SEDIMENT SAMPLING AREAS RIVER MILE 36.1-37.0
-------	---

PROJECT	RÜTGERS ORGANICS CORPORATION
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LEGEND

- RIVER MILE POINT
- 2009 RECONNAISSANCE - SEDIMENT DESCRIPTION RECORDED
- 2010 FINE-GRAINED SEDIMENT SUB-SAMPLE LOCATION
- × OBSTRUCTION
- 📷 PHOTOGRAPH LOCATION
- FINE-GRAINED SEDIMENT COMPOSITE SAMPLE LOCATION
- MFLBC
- ↓ DOWNSTREAM END OF FISH SAMPLING REACH (APPROX.)
- ↑ UPSTREAM END OF FISH SAMPLING REACH (APPROX.)

NOTE

- 1.) SEE APPENDIX A FOR PHOTOGRAPHS TAKEN AT EACH PHOTOGRAPH LOCATION.
- 2.) "RIVER MILE POINT" LOCATIONS REPRESENT THE DIVIDE BETWEEN ADJACENT COMPOSITE SAMPLE AREAS.

REFERENCE

- 1.) AERIAL PHOTOGRAPH FROM SPRING 2006 PROVIDED BY OHIO EPA.

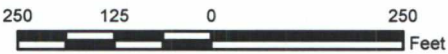


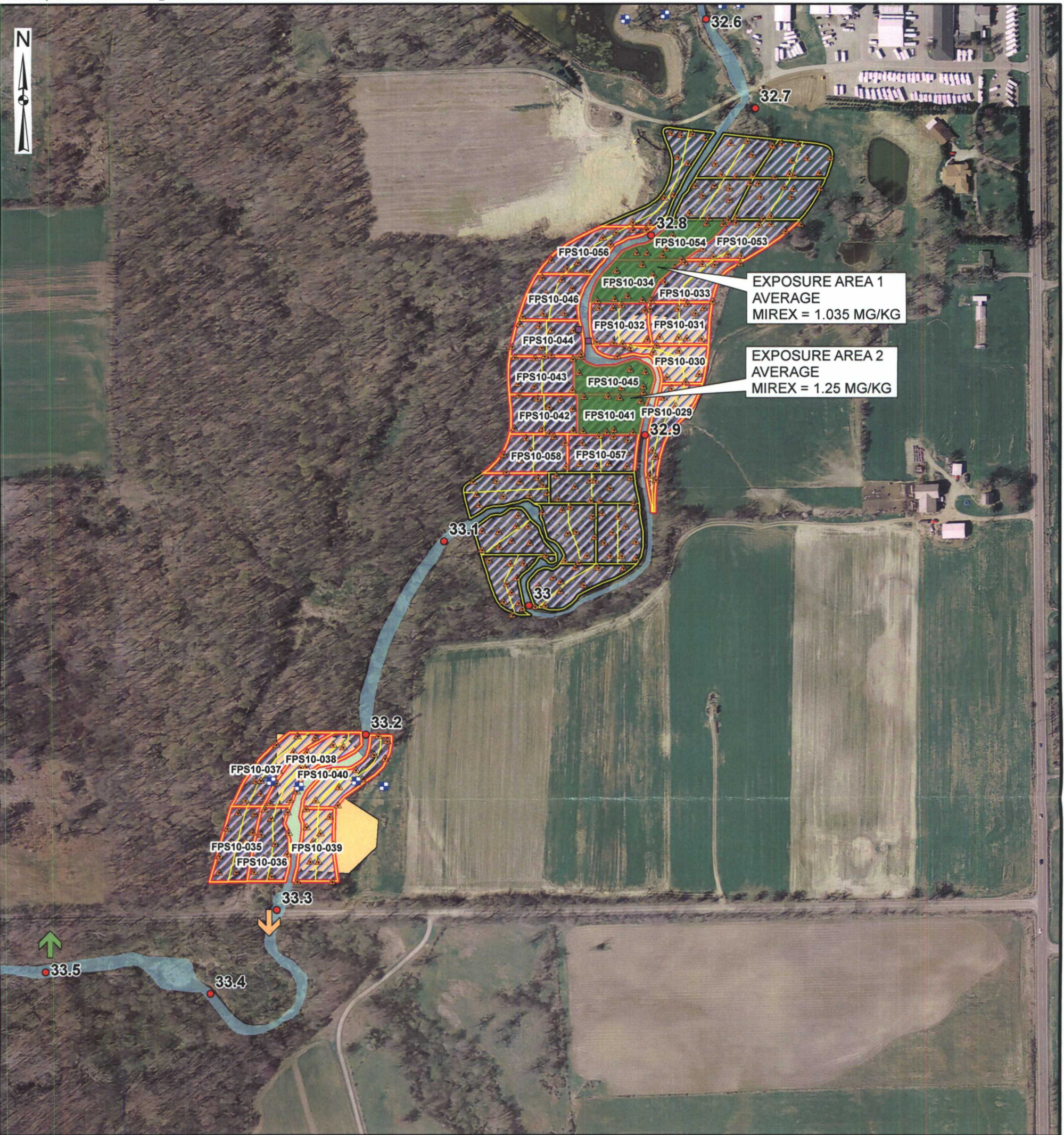
FIGURE 9

PROJECT No.		TITLE	
933-6154	9336154ZE09	SEDIMENT SAMPLING AREAS RIVER MILE 37.1-37.6	
FILE No.		PROJECT	
REV. 0	SCALE: AS SHOWN	RÜTGERS ORGANICS CORPORATION	
DESIGN	APJ		
GIS	AM		
CHECK	APJ		
REVIEW	PSF		
08/01/11	08/01/11		

SEDIMENT SAMPLING AREAS
RIVER MILE 37.1-37.6

RÜTGERS
ORGANICS CORPORATION





LEGEND

- RIVER MILE POINT
- 2010-2011 OU3 PDI FLOODPLAIN SOIL SUB SAMPLE LOCATION
- RI FLOODPLAIN SOIL SAMPLE LOCATION
- COARSE-GRAINED SEDIMENT SAMPLE LOCATION
- DOWNSTREAM END OF FISH SAMPLING REACH (APPROX.)
- UPSTREAM END OF FISH SAMPLING REACH (APPROX.)
- QUARTER ACRE AREA
- OU3 PDI FLOODPLAIN SOIL SAMPLE - ARCHIVED
- OU3 PDI FLOODPLAIN SOIL SAMPLE - ANALYZED
- FLOODPLAIN SOIL EXPOSURE AREA
- 2006 COMPOSITE FLOODPLAIN SOIL SAMPLE LOCATION
- MIDDLE FORK LITTLE BEAVER CREEK

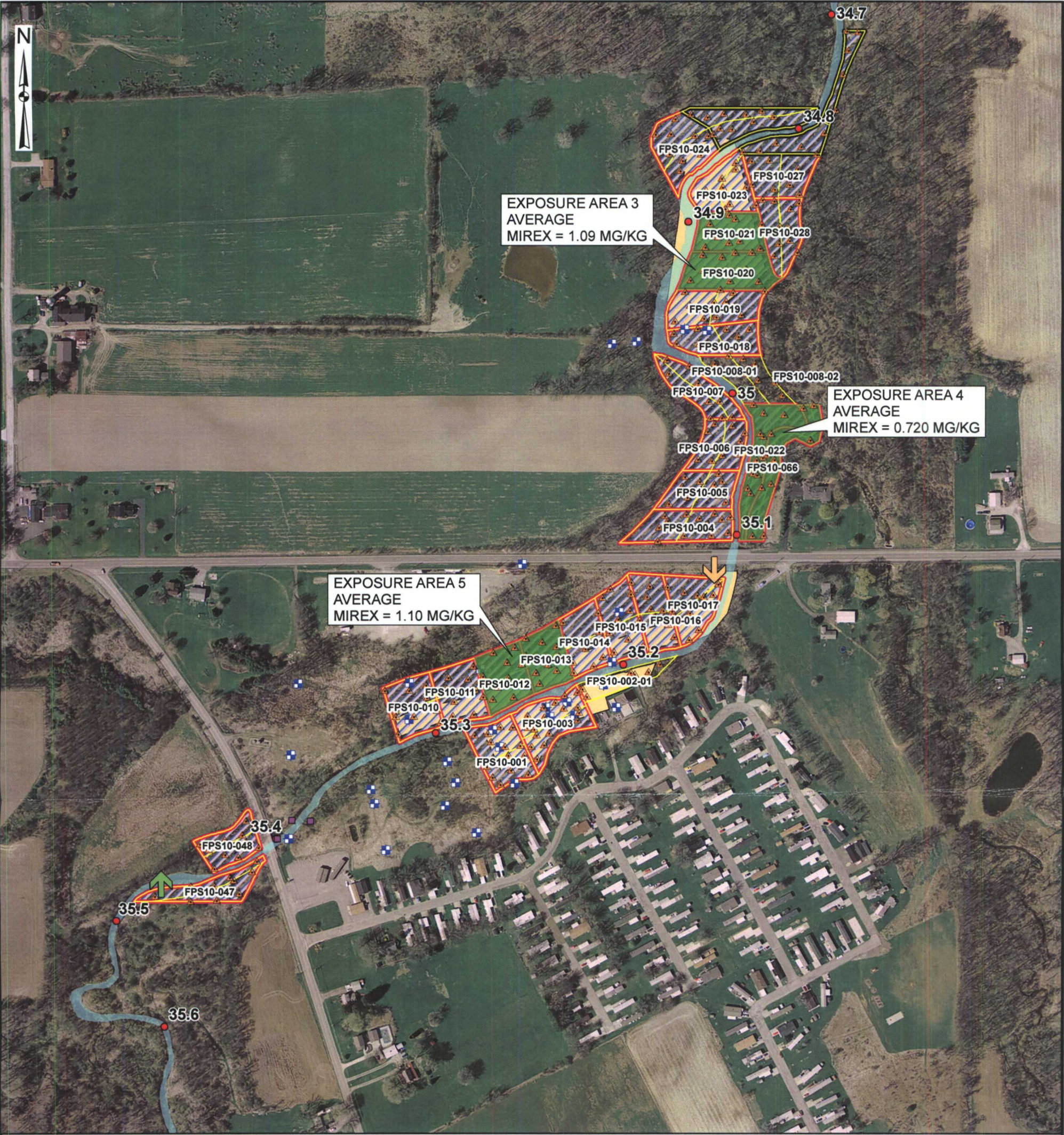
NOTE

1.) EXPOSURE AREAS WERE DEVELOPED TO INCLUDE ALL 1/2 ACRE SAMPLE RESULTS WITH MIREX > 1 MG/KG.

REFERENCE

1.) AERIAL FROM SPRING 2006 PROVIDED BY OHIO EPA.





LEGEND

- RIVER MILE POINT
- 2010-2011 OU3 PDI FLOODPLAIN SOIL SUB SAMPLE LOCATION
- RI FLOODPLAIN SOIL SAMPLE LOCATION
- COARSE-GRAINED SEDIMENT SAMPLE LOCATION
- DOWNSTREAM END OF FISH SAMPLING REACH (APPROX.)
- UPSTREAM END OF FISH SAMPLING REACH (APPROX.)
- QUARTER ACRE AREA
- OU3 PDI FLOODPLAIN SOIL SAMPLE - ARCHIVED
- OU3 PDI FLOODPLAIN SOIL SAMPLE - ANALYZED
- FLOODPLAIN SOIL EXPOSURE AREA
- 2006 COMPOSITE FLOODPLAIN SOIL SAMPLE LOCATION
- MIDDLE FORK LITTLE BEAVER CREEK

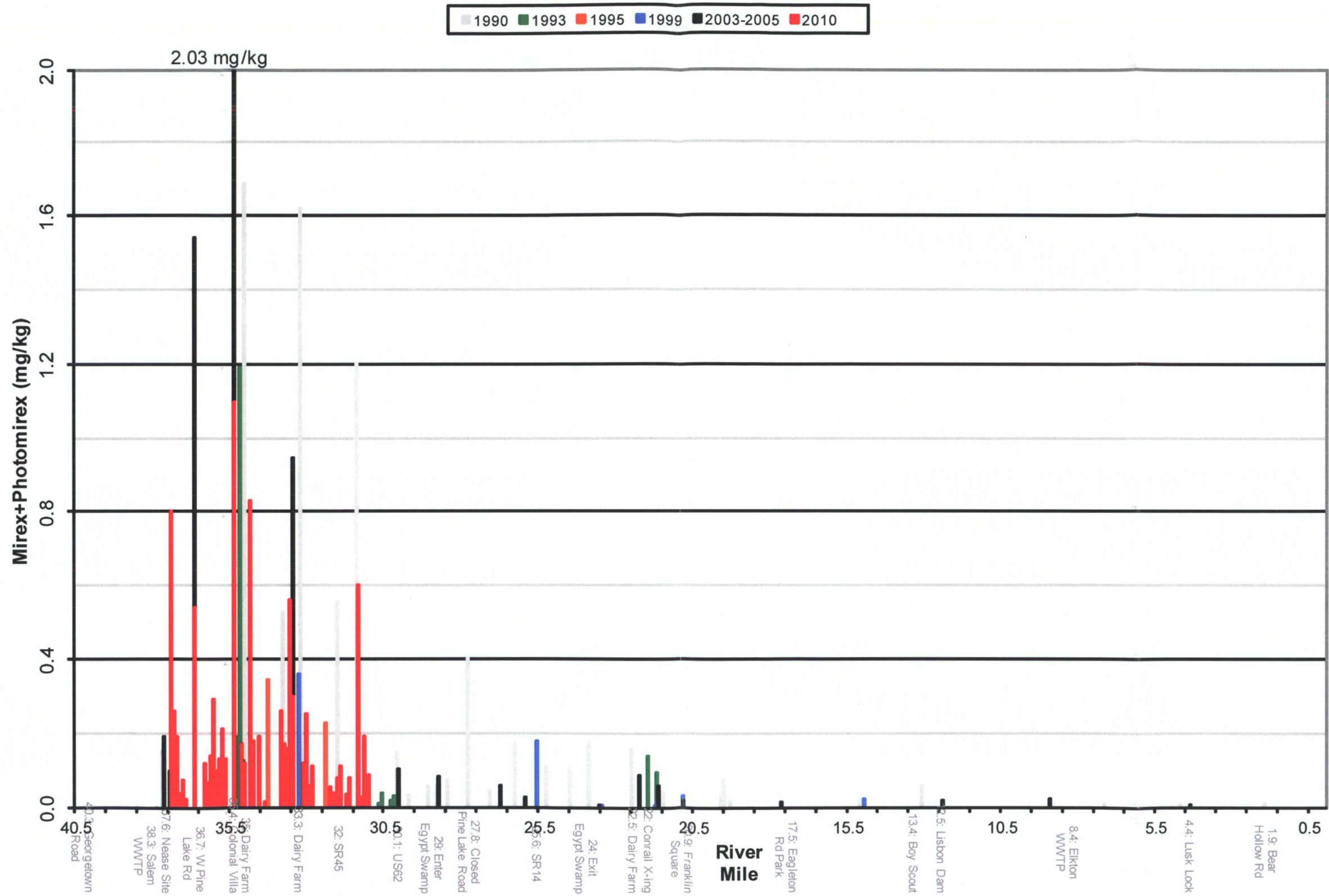
NOTE

1.) EXPOSURE AREAS WERE DEVELOPED TO INCLUDE ALL 1/2 ACRE SAMPLE RESULTS WITH MIREX > 1 MG/KG.

REFERENCE

1.) AERIAL FROM SPRING 2006 PROVIDED BY OHIO EPA.

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FILE No. 933-6154
PROJECT No. 9336154ZE12 REV. 0

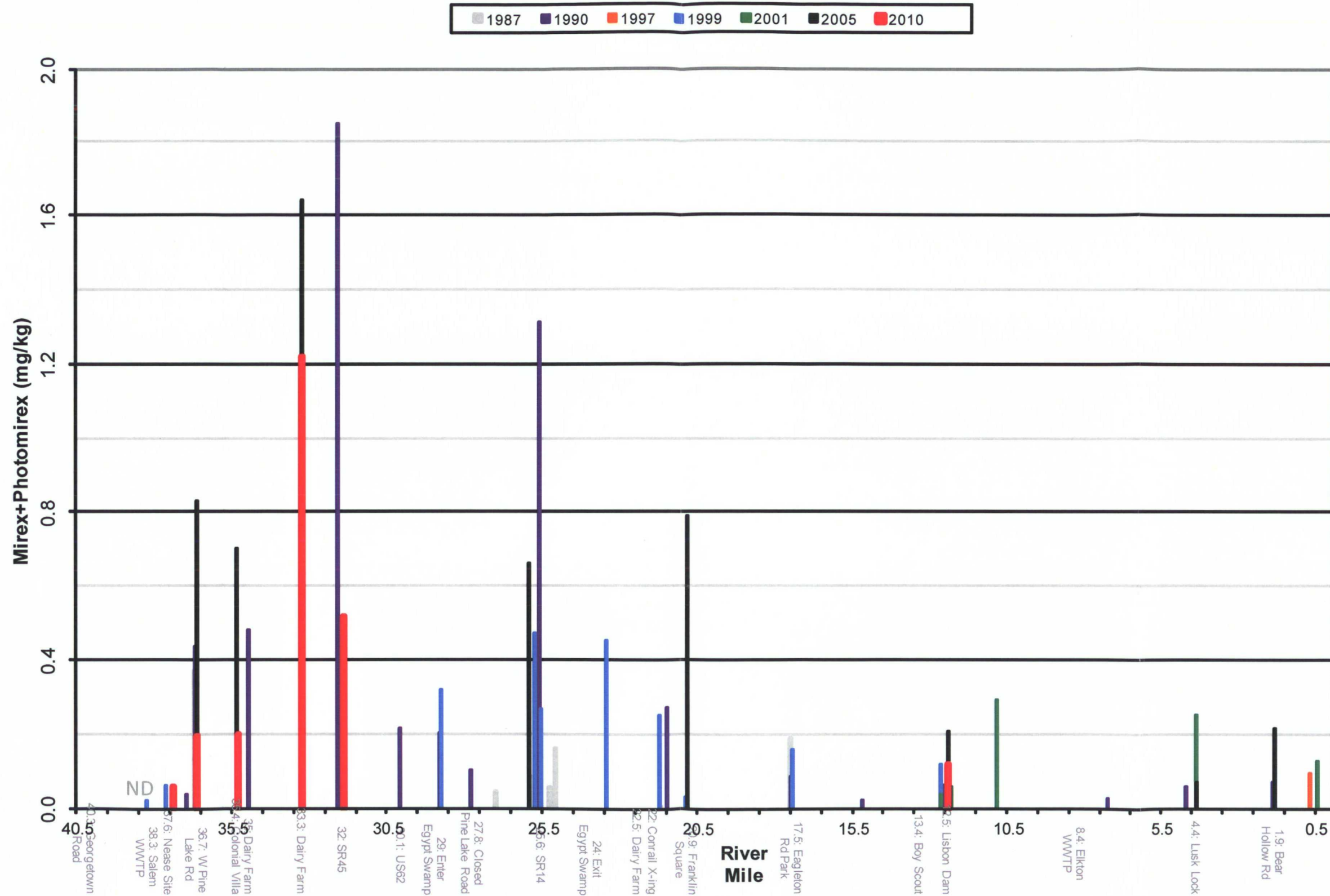
SCALE N.T.S.
DATE 08/01/11
DESIGN APJ
GIS AM
CHECK APJ
REVIEW PSF

SEDIMENT MIREX CONCENTRATION DISTANCE GRAPH

RUTGERS
ORGANICS CORPORATION

FIGURE 12

Path: V:\Projects\1993\933-6154\REPORT_FILES\REPORT_OU3-PDI-Technical-Memo\MXD\9336154ZE13.mxd



NOTE

1.) CONCENTRATION SHOWN AT EACH RIVER MILE IS THE MAXIMUM DETECTION AMONG SEVERAL SPECIES COLLECTED. IN MOST CASES THERE ARE ADDITIONAL SAMPLES WITH LOWER CONCENTRATIONS.



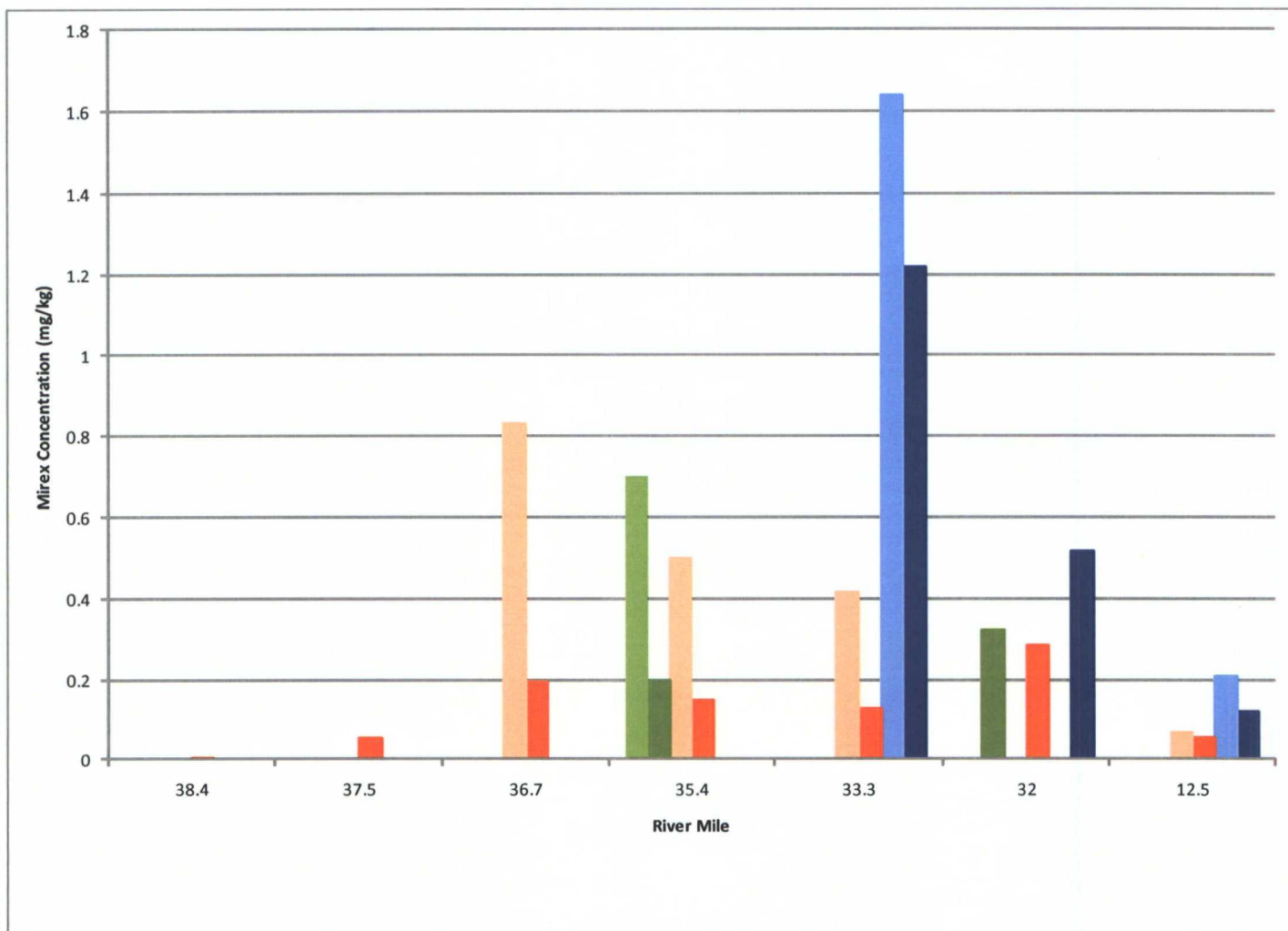
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PROJECT No. 9336154ZE13 REV. 0

SCALE N.T.S.
DATE 08/01/11
DESIGN APJ
GIS AM
CHECK APJ
REVIEW PSF

FISH TISSUE FILLET MIREX CONCENTRATION DISTANCE GRAPH

RUTGERS ORGANICS CORPORATION

FIGURE 13



LEGEND

- | | |
|--|--|
| ■ COMMON CARP - 2005 - FILLET | ■ COMMON CARP - 2010 - FILLET |
| ■ WHITE SUCKER - 2005 - FILLET | ■ WHITE SUCKER - 2010 - FILLET |
| ■ YELLOW BULLHEAD - 2005 - FILLET | ■ YELLOW BULLHEAD - 2010 - FILLET |



FILE No. 933-6154
PROJECT No. 9336154ZE14 REV. 0

SCALE N.T.S.
DATE 08/01/11
DESIGN APJ
GIS AM
CHECK APJ
REVIEW PSF

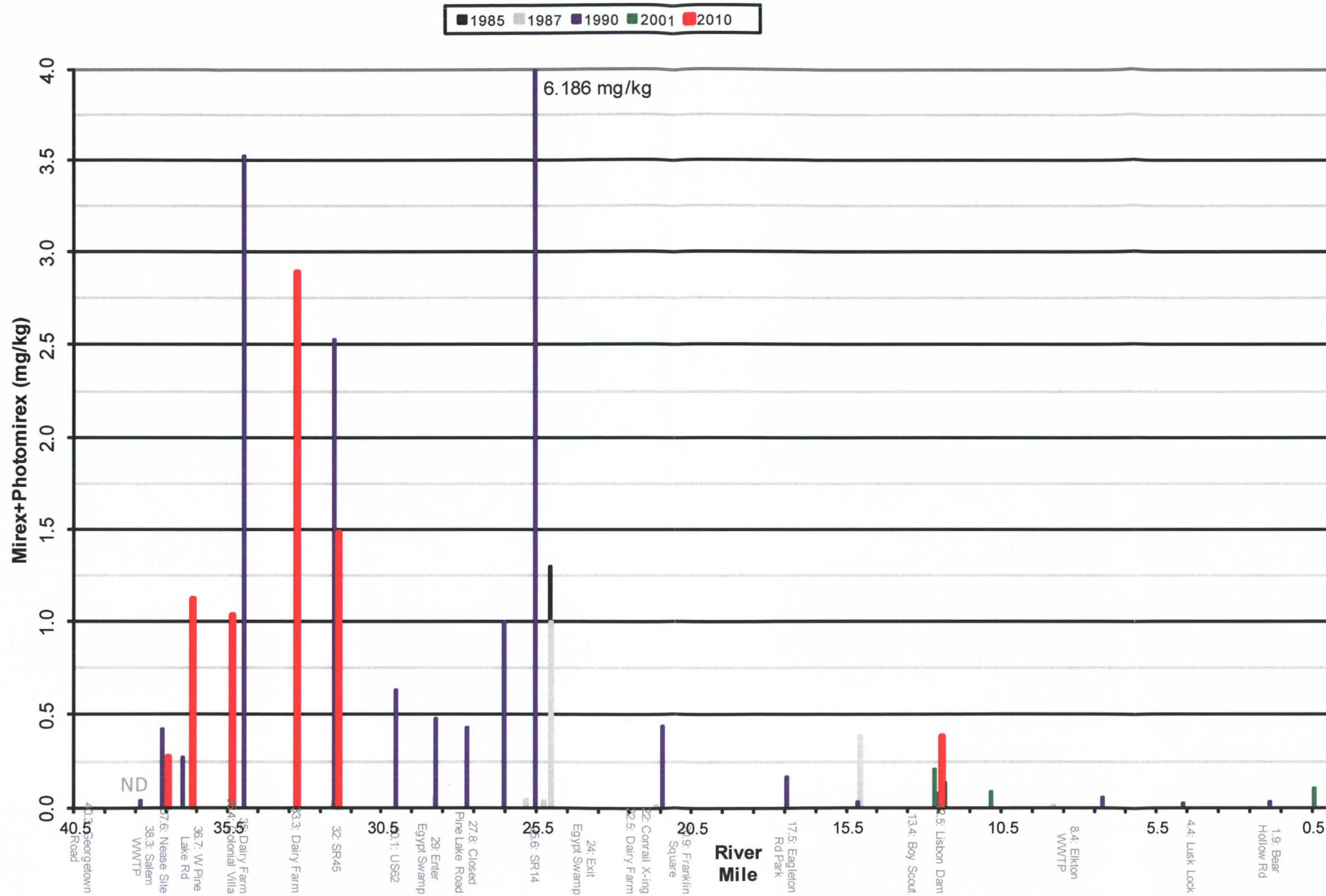
COMPARISON OF 2005 AND 2010 FISH TISSUE FILLET MIREX CONCENTRATIONS

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FIGURE


14

Path: V:\Project\1993\933-6154\REPORT_FILES\SIZE-OU3-PDI-Technical-Memo\MXD\9336154ZE15.mxd



NOTE

1.) CONCENTRATION SHOWN AT EACH RIVER MILE IS THE MAXIMUM DETECTION AMONG SEVERAL SPECIES COLLECTED. IN MOST CASES THERE ARE ADDITIONAL SAMPLES WITH LOWER CONCENTRATIONS.

 Golder Associates Mt. Laurel, New Jersey	SCALE	N.T.S.	FISH TISSUE WHOLE BODY MIREX CONCENTRATION DISTANCE GRAPH		
	DATE	08/01/11			
	DESIGN	APJ			
	GIS	AM			
FILE No.	933-6154	CHECK	APJ	RUTGERS ORGANICS CORPORATION	FIGURE 15
PROJECT No.	9336154ZE15	REV.	0		

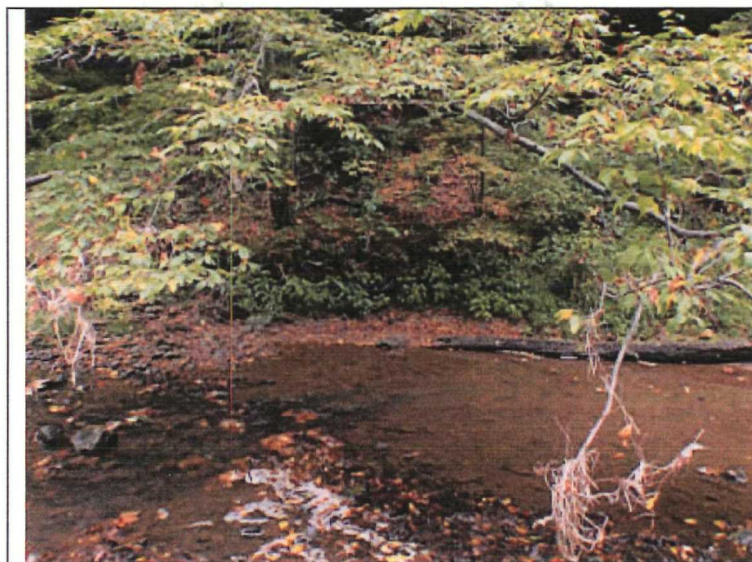
APPENDIX A
PHOTOGRAPHS OF MFLBC



31.1-1 North



31.1-1 South



31.1-1 East



31.1-1 West



31.2 North



31.2 South



31.2 East



31.2 West



31.3-1 South



31.3-1 West



31.4-1 North



31.4-1 South



31.4-1 East



31.4-1 West



31.6-1 North



31.6-1 South



31.6-1 East



31.6-1 West



31.7-1 North



31.7-1 South



31.7-1 East



31.7-1 West



31.8-1 North



31.8-1 South



31.8-1 East



31.8-1 West



31.8-2 North



31.8-2 South



31.8-2 East



31.8-2 West



31.8-3 North



31.8-3 South



31.8-3 East



31.8-3 West



31.9-1 North



31.9-1 South



31.9-1 East



31.9-1 West



31.9-2 North



31.9-2 South



31.9-2 East



31.9-2 West



32.0-1 North



32.0-1 South



32.0-1 East



32.0-1 West



32.0-3 North



32.0-3 South



32.0-3 East



32.0-3 West



32.1-1 North



32.1-1 South



32.1-1 East



32.1-1 West



32.2-2 North



32.2-2 South



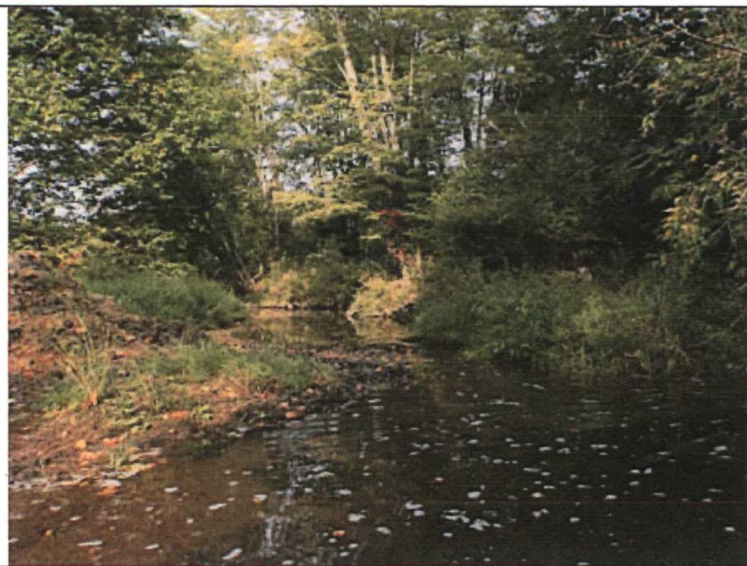
32.2-2 East



32.2-2 West



32.3-1 Southwest



32.3-1 Northwest



32.3-1 Northeast



32.3-1 Southeast



32.4-2 North



32.4-2 South



32.4-2 East



32.4-2 West



32.5 North



32.5 South



32.5 East



32.5 West



32.6 North



32.6 South



32.6 East



32.6 West



32.7 North



32.7 South



32.7 East



32.7 West



32.9 North



32.9 South



32.9 East



32.9 West



32.9-3 North



32.9-3 South



32.9-3 West



32.9-3 East



33.0-1 North



33.0-1 South



33.0-1 East



33.0-1 West



33.2-1 North



33.2-1 South



33.2-1 East



33.2-1 West



33.2-3 North



33.2-3 South



33.2-3 East



33.2-1 West



33.3-1 North



33.3-1 South



33.3-1 East



33.3-1 West



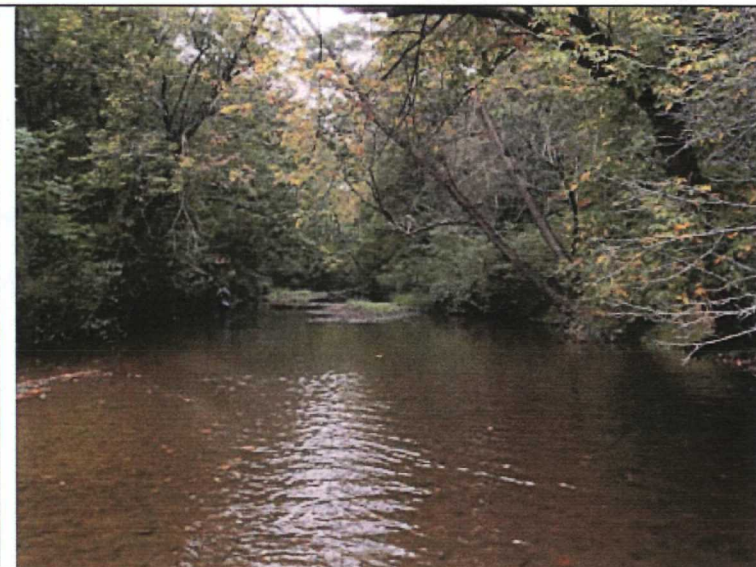
33.5-1 North



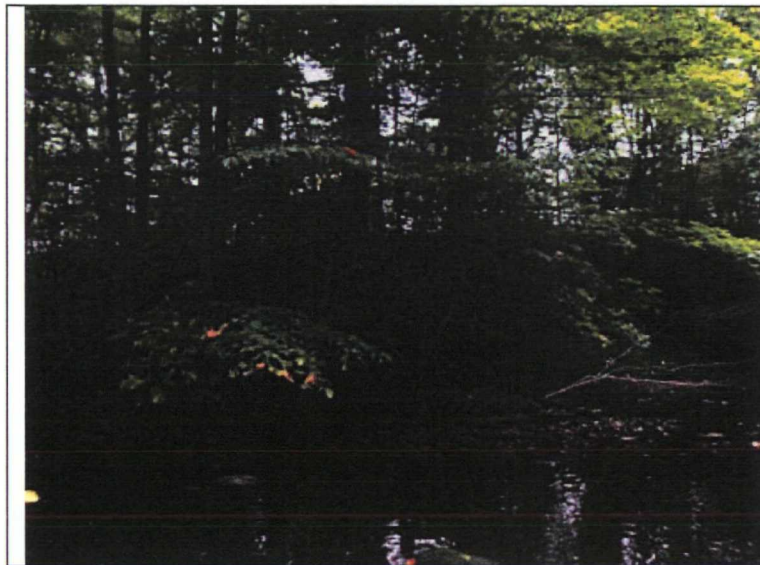
33.5-1 South



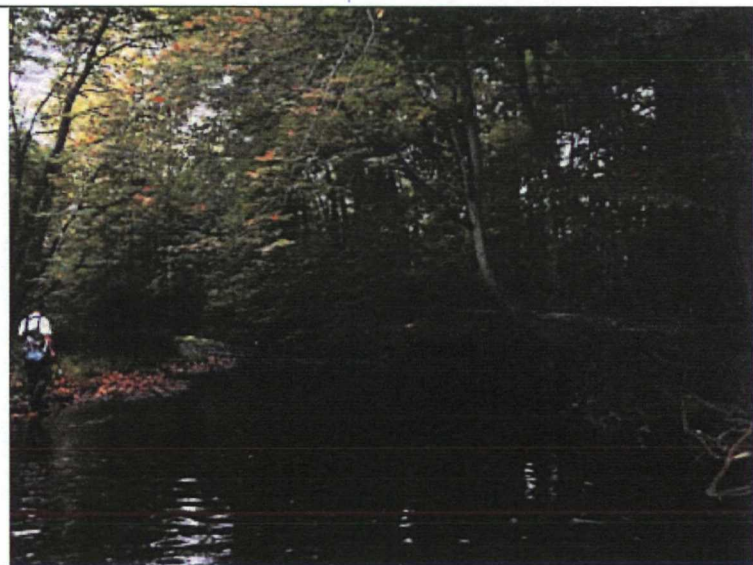
33.5-1 East



33.5-1 West



33.6-2 Downstream



33.6-2 Downstream Left



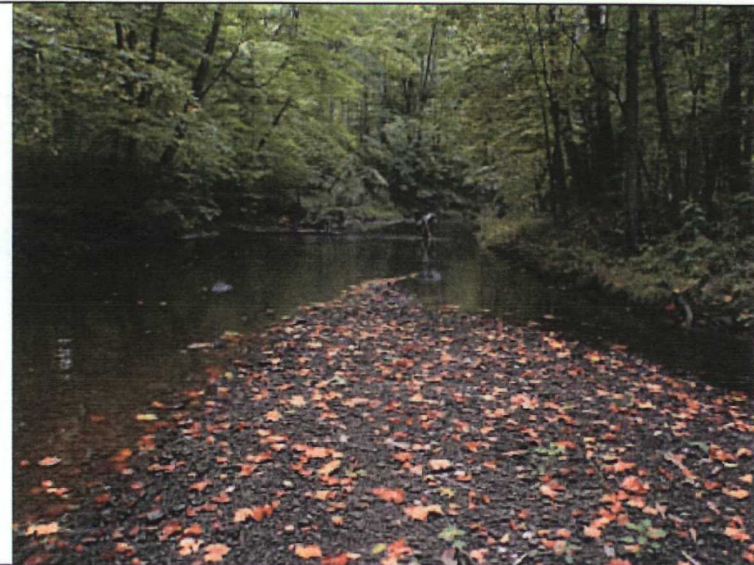
33.6-2 Downstream Right



33.6-2 Upstream



33.7-1 North



33.7-1 South



33.7-1 East



33.7-1 West



33.8-2 North



33.8-2 South



33.8-2 East

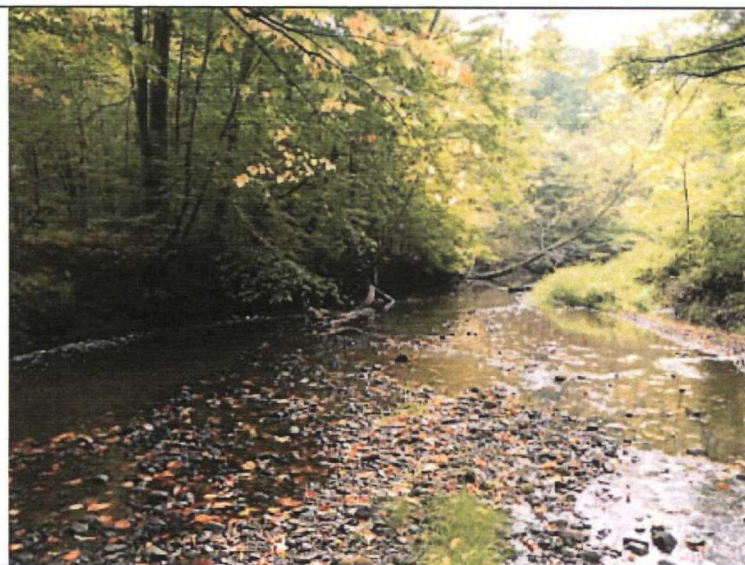


33.8-2 West





34.0-1 North



34.0-1 South



34.0-1 East



34.0-1 West



34.0-2 North



34.0-2 South



34.0-2 East



34.0-2 West



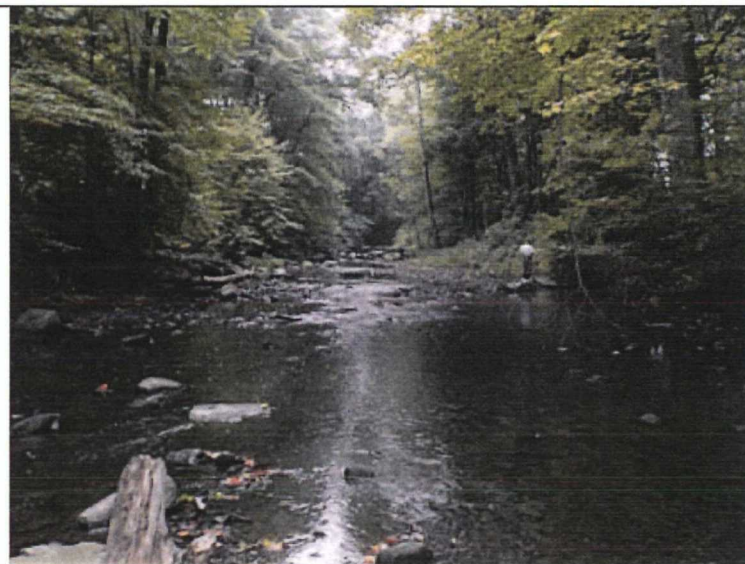
34.2-1 Downstream



34.2-1 Downstream Left



34.2-1 Downstream Right



34.2-1 Upstream



34.3-1 Downstream



34.3-1 Downstream Left



34.3-1 Downstream Right



34.3- Upstream



34.5-1 Downstream



34.5-1 Downstream Left



34.5-1 Downstream Right



34.5-1 Upstream



34.6 Downstream



34.6 Downstream Left



34.6 Downstream Right



34.6 Upstream



34.7 Downstream



34.7 Downstream Left



34.7 Downstream Right



34.7 Upstream



34.8 Downstream



34.8 Downstream Left



34.8 Downstream Right



34.8 Upstream



34.9 Downstream



34.9 Downstream Left



34.9 Downstream Right



34.9 Upstream



35 Downstream



35 Downstream Left



35 Downstream Right



35 Upstream



35.1 Downstream



35.1 Downstream Left



35.1 Downstream Right



35.1 Upstream



35.2 Downstream



35.2 Downstream Left



35.2 Downstream Right



35.2 Upstream



35.3 Downstream



35.3 Downstream Left



35.3 Downstream Right



35.3 Upstream



35.4 Downstream



35.4 Downstream Left



35.4 Downstream Right



35.4 Upstream



35.5 Downstream



35.5 Downstream Left



35.5 Downstream Right



35.5 Upstream



35.6 Downstream



35.6 Downstream Left



35.6 Downstream Right



35.6 Upstream



35.7 Downstream



35.7 Downstream Left



35.7 Downstream Right



35.7 Upstream



35.7-1 Downstream



35.7-1 Downstream Left



35.7-1 Downstream Right



35.7-1 Upstream



35.8 Downstream



35.8 Downstream Left



35.8 Downstream Right



35.8 Upstream



35.9 Downstream



35.9 Downstream Left



35.9 Downstream Right



35.9 Upstream



36 Downstream



36 Downstream Left



36 Downstream Right



36 Upstream



36.1 Downstream



36.1 Downstream Left



36.1 Downstream Right



36.1 Upstream



36.2 Downstream



36.2 Downstream Left



36.2 Downstream Right



36.2 Upstream



36.2-1 Downstream



36.2-1 Downstream Left



36.2-1 Downstream Right



36.2-1 Upstream



36.3 Downstream



36.3 Downstream Left



36.3 Downstream Right



36.3 Upstream



36.4 Downstream



36.4 Downstream Left



36.4 Downstream Right



36.4 Upstream



36.7-2 North



36.7-2 South



36.7-2 East



36.7-2 West



36.8-1 North



36.8-1 South



36.8-1 East



36.8-1 West



36.9-1 North



36.9-1 South



36.9-1 East



36.9-1 West



37.1-1 North



37.1-1 South



37.1-1 East



37.1-1 West



37.2 North



37.2 South



37.2 East



37.2 West



37.3-1 North



37.3-1 South



37.3-1 East



37.3-1 West



37.4-1 North



37.4-1 South



37.4-1 East



37.4-1 West



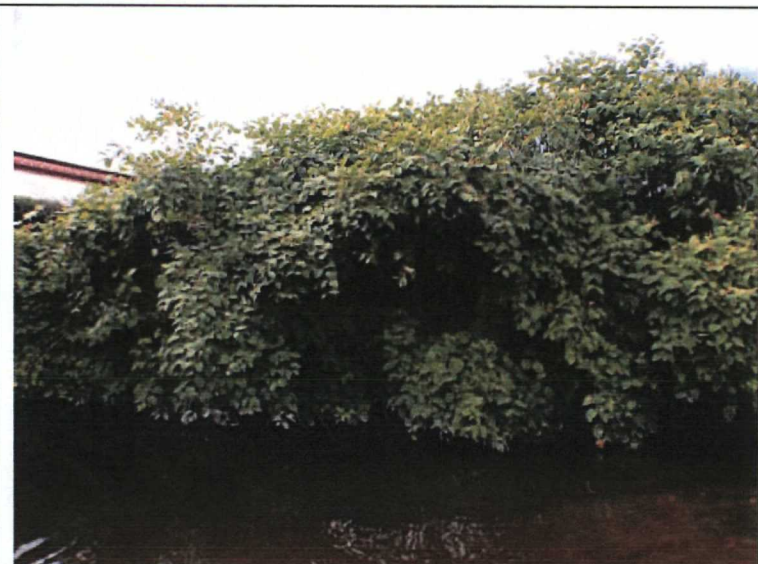
37.5-1 North



37.5-1 South



37.5-1 East



37.5-1 West



37.6-1 North



37.6-1 South



37.6-1 East



37.6-1 West



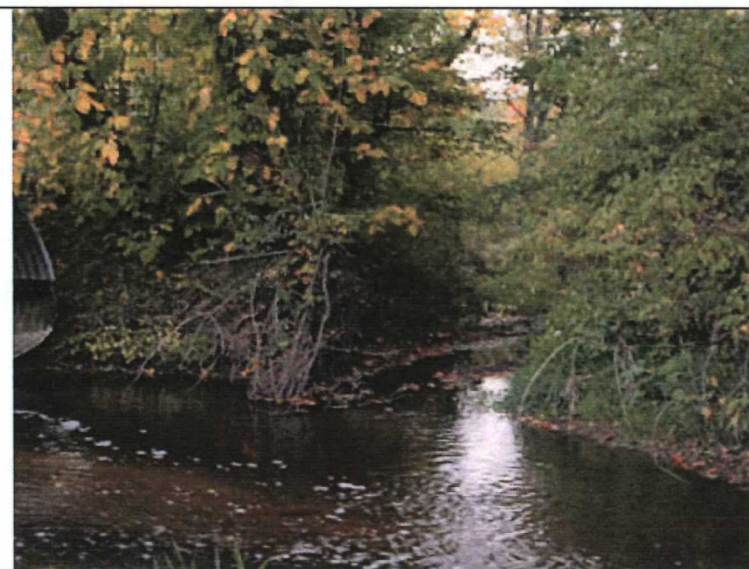
37.7-1 North



37.7-1 South



37.7-1 East



37.7-1 West

APPENDIX B

ANALYTICAL LABORATORY DATA



Rutgers Organics Corporation

Client Sample ID: SD10-31.7L-0-4

GC Semivolatiles

Lot-Sample #...: A0I130456-001 Work Order #...: L6WGD1AE Matrix.....: SO
 Date Sampled...: 09/08/10 16:30 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #...: 0260032
 Dilution Factor: 10 Initial Wgt/Vol: 30.02 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 40 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	80 J	55	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	72 DIL	(31 - 131)
Decachlorobiphenyl	72 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-31.1R-0-2

GC Semivolatiles

Lot-Sample #....: A0I130456-002 Work Order #....: L6WGN1AE Matrix.....: SO
 Date Sampled....: 09/08/10 12:15 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #....: 0260032
 Dilution Factor: 10 Initial Wgt/Vol: 29.95 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 41 Method.....: SW846 8081B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Mirex	86 J	56	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	
Tetrachloro-m-xylene	88 DIL	(31 - 131)	
Decachlorobiphenyl	99 DIL	(18 - 145)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-31.4R-0-6

GC Semivolatiles

Lot-Sample #...: A0I130456-003 Work Order #...: L6WGQ1AE Matrix.....: SO
 Date Sampled...: 09/08/10 15:20 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/21/10
 Prep Batch #...: 0260032
 Dilution Factor: 100 Initial Wgt/Vol: 30.2 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 31 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	600 J	480	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	121 DIL	(31 - 131)
Decachlorobiphenyl	120 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-31.2L-0-4

GC Semivolatiles

Lot-Sample #...: A0I130456-004 Work Order #...: L6WGR1AE Matrix.....: SO
 Date Sampled...: 09/08/10 13:10 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/27/10
 Prep Batch #...: 0260032
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 60 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	190 J	82	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85 DIL	(31 - 131)
Decachlorobiphenyl	93 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: SD10-31.8-0-4

GC Semivolatiles

Lot-Sample #...: A0I130456-005 Work Order #...: L6WGT1AE Matrix.....: SO
 Date Sampled...: 09/08/10 17:25 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #...: 0260032
 Dilution Factor: 5 Initial Wgt/Vol: 30.08 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 44 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	34 J	30	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79 DIL	(31 - 131)
Decachlorobiphenyl	90 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-31.3R-0-6

GC Semivolatiles

Lot-Sample #...: A0I130456-006 Work Order #...: L6WGV1AE Matrix.....: SO
 Date Sampled...: 09/08/10 14:15 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/27/10
 Prep Batch #...: 0260032
 Dilution Factor: 2 Initial Wgt/Vol: 30.18 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 48 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	26 J	13	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(31 - 131)
Decachlorobiphenyl	86	(18 - 145)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.0-0-6

GC Semivolatiles

Lot-Sample #...: A01130456-007 Work Order #...: L6WGX1AE Matrix.....: SO
 Date Sampled...: 09/08/10 19:00 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/27/10
 Prep Batch #...: 0260032
 Dilution Factor: 10 Initial Wgt/Vol: 30.17 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 53 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	110 J	70	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81 DIL	(31 - 131)
Decachlorobiphenyl	96 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.1R-0-1

GC Semivolatiles

Lot-Sample #....: A0I130456-008 Work Order #....: L6WG11AE Matrix.....: SO
 Date Sampled...: 09/09/10 09:00 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #....: 0260032
 Dilution Factor: 5 Initial Wgt/Vol: 30.06 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 61 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	77 <u>J</u>	42	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Tetrachloro-m-xylene	68 DIL	(31 - 131)	
Decachlorobiphenyl	74 DIL	(18 - 145)	

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.2L-0-1

GC Semivolatiles

Lot-Sample #...: A0I130456-009 Work Order #...: L6WG31AE Matrix.....: SO
 Date Sampled...: 09/09/10 09:50 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/27/10
 Prep Batch #...: 0260032
 Dilution Factor: 2 Initial Wgt/Vol: 30.06 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 57 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	37 J	15	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Tetrachloro-m-xylene	64	(31 - 131)	
Decachlorobiphenyl	78	(18 - 145)	

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.3L-0-6

GC Semivolatiles

Lot-Sample #...: A0I130456-010 Work Order #...: L6WG71AE Matrix.....: SO
 Date Sampled...: 09/09/10 10:45 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #...: 0260032
 Dilution Factor: 5 Initial Wgt/Vol: 30.19 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 53 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	56 J	35	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Tetrachloro-m-xylene	75 DIL	(31 - 131)	
Decachlorobiphenyl	85 DIL	(18 - 145)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-33.0R-0-2

GC Semivolatiles

Lot-Sample #...: A0I130456-011 Work Order #...: L6WHA1AE Matrix.....: SO
 Date Sampled...: 09/09/10 13:50 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #...: 0260032
 Dilution Factor: 5 Initial Wgt/Vol: 30.17 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 63 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	57 J	44	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Tetrachloro-m-xylene	80 DIL	(31 - 131)	
Decachlorobiphenyl	90 DIL	(18 - 145)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-33.1L-0-4

GC Semivolatiles

Lot-Sample #...: A01130456-012 Work Order #...: L6WHD1AE Matrix.....: SO
 Date Sampled...: 09/09/10 14:40 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #...: 0260032
 Dilution Factor: 20 Initial Wgt/Vol: 29.99 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 54 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	170 J	140	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84 DIL	(31 - 131)
Decachlorobiphenyl	72 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.9R-0-3

GC Semivolatiles

Lot-Sample #...: A0I130456-013 Work Order #...: L6WHE1AD Matrix.....: SO
 Date Sampled...: 09/09/10 13:10 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #...: 0260032
 Dilution Factor: 10 Initial Wgt/Vol: 30.05 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 52 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	110 J	69	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81 DIL	(31 - 131)
Decachlorobiphenyl	76 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-DUP-01

GC Semivolatiles

Lot-Sample #...: A01130456-014 Work Order #...: L6WHH1AE Matrix.....: SO
 Date Sampled...: 09/09/10 14:40 Date Received...: 09/10/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #...: 0260032
 Dilution Factor: 20 Initial Wgt/Vol: 30.11 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 56 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	250 J	150	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94 DIL	(31 - 131)
Decachlorobiphenyl	96 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-31.7L-0-4

General Chemistry

Lot-Sample #...: A0I130456-001 Work Order #...: L6WGD Matrix.....: SO
Date Sampled...: 09/08/10 16:30 Date Received...: 09/10/10
% Moisture.....: 40

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	60.0	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
Dilution Factor: 1						
Total Organic Carbon	13000	1700	mg/kg	MSA WALKLEY-BLACK	09/17/10	0260201
Dilution Factor: 1						

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-31.1R-0-2

General Chemistry

Lot-Sample #...: A0I130456-002 Work Order #...: L6WGN Matrix.....: SO
Date Sampled...: 09/08/10 12:15 Date Received...: 09/10/10
% Moisture.....: 41

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	58.9	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
			Dilution Factor: 1			
Total Organic Carbon	15000	1700	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-31.4R-0-6

General Chemistry

Lot-Sample #...: A0I130456-003 Work Order #...: L6WGQ Matrix.....: SO
Date Sampled...: 09/08/10 15:20 Date Received...: 09/10/10
% Moisture.....: 31

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	69.2	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
			Dilution Factor: 1			
Total Organic Carbon	6300	1400	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Rutgers Organics Corporation

Client Sample ID: SD10-31.2L-0-4

General Chemistry

Lot-Sample #....: AOI130456-004 Work Order #....: L6WGR Matrix.....: SO
 Date Sampled....: 09/08/10 13:10 Date Received...: 09/10/10
 % Moisture.....: 60

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	40.3	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
				Dilution Factor: 1		
Total Organic Carbon	10000	2500	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
				Dilution Factor: 1		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Rutgers Organics Corporation

Client Sample ID: SD10-31.8-0-4

General Chemistry

Lot-Sample #...: A0I130456-005 Work Order #...: L6WGT Matrix.....: SO
Date Sampled...: 09/08/10 17:25 Date Received...: 09/10/10
% Moisture.....: 44

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	55.8	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
		Dilution Factor: 1				
Total Organic Carbon	14000	1800	mg/kg	MSA WALKLEY-BLACK	09/17/10	0260201
		Dilution Factor: 1				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-31.3R-0-6

General Chemistry

Lot-Sample #...: A0I130456-006 Work Order #...: L6WGV Matrix.....: SO
Date Sampled...: 09/08/10 14:15 Date Received...: 09/10/10
% Moisture.....: 48

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	52.4	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
			Dilution Factor: 1			
Total Organic Carbon	4500	1900	mg/kg	MSA WALKLEY-BLACK	09/17/10	0260201
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.0-0-6

General Chemistry

Lot-Sample #...: A0I130456-007 Work Order #...: L6WGX Matrix.....: SO
Date Sampled...: 09/08/10 19:00 Date Received...: 09/10/10
% Moisture.....: 53

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	47.0	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
			Dilution Factor: 1			
Total Organic Carbon	20000	11000	mg/kg	MSA WALKLEY-BLACK	09/17/10	0260201
			Dilution Factor: 5			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.1R-0-1

General Chemistry

Lot-Sample #...: A0I130456-008 Work Order #...: L6WG1 Matrix.....: SO
Date Sampled...: 09/09/10 09:00 Date Received...: 09/10/10
% Moisture.....: 61

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	39.5	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
			Dilution Factor: 1			
Total Organic Carbon	32000	2500	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.2L-0-1

General Chemistry

Lot-Sample #...: A0I130456-009 Work Order #...: L6WG3 Matrix.....: SO
 Date Sampled...: 09/09/10 09:50 Date Received...: 09/10/10
 % Moisture.....: 57

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	42.9	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
	Dilution Factor: 1					
Total Organic Carbon	26000	2300	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
	Dilution Factor: 1					

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.3L-0-6

General Chemistry

Lot-Sample #...: A0I130456-010 Work Order #...: L6WG7 Matrix.....: SO
Date Sampled...: 09/09/10 10:45 Date Received...: 09/10/10
% Moisture.....: 53

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	47.3	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
				Dilution Factor: 1		
Total Organic Carbon	23000	2100	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
				Dilution Factor: 1		

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-33.0R-0-2

General Chemistry

Lot-Sample #...: A0I130456-011 Work Order #...: L6WHA Matrix.....: SO
Date Sampled...: 09/09/10 13:50 Date Received...: 09/10/10
% Moisture.....: 63

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	37.3	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
			Dilution Factor: 1			
Total Organic Carbon	20000	13000	mg/kg	MSA WALKLEY-BLACK	09/17/10	0260201
			Dilution Factor: 5			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-33.1L-0-4

General Chemistry

Lot-Sample #...: A0I130456-012 Work Order #...: L6WHD Matrix.....: SO
 Date Sampled...: 09/09/10 14:40 Date Received...: 09/10/10
 % Moisture.....: 54

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	45.6	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
	Dilution Factor: 1					
Total Organic Carbon	29000	2200	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
	Dilution Factor: 1					

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.9R-0-3

General Chemistry

Lot-Sample #...: A0I130456-013 Work Order #...: L6WHE Matrix.....: SO
Date Sampled...: 09/09/10 13:10 Date Received...: 09/10/10
% Moisture.....: 52

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	48.2	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
			Dilution Factor: 1			
Total Organic Carbon	9600	2100	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-DUP-01

General Chemistry

Lot-Sample #...: A0I130456-014 Work Order #...: L6WHH Matrix.....: SO
Date Sampled...: 09/09/10 14:40 Date Received...: 09/10/10
% Moisture.....: 56

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	43.9	10.0	%	MCAWW 160.3 MOD	09/13-09/14/10	0256335
			Dilution Factor: 1			
Total Organic Carbon	29000	2300	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.0C-0-3

General Chemistry

Lot-Sample #...: A0I130456-015 Work Order #...: L6WHJ Matrix.....: SO
 Date Sampled...: 09/08/10 19:25 Date Received...: 09/10/10
 % Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	74.7	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279271
				Dilution Factor: 1		
Total Organic Carbon	540 B J	1300	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
				Dilution Factor: 1		

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Ruettgers Organics Corporation

Client Sample ID: SD10-31.9C-0-4

General Chemistry

Lot-Sample #...: A0I130456-016 Work Order #...: L6WHL Matrix.....: SO
Date Sampled...: 09/08/10 18:15 Date Received...: 09/10/10
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	76.0	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279271
			Dilution Factor: 1			
Total Organic Carbon	ND	1300	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-32.9C-0-3

General Chemistry

Lot-Sample #...: A0I130456-017 Work Order #...: L6WHM Matrix.....: SO
Date Sampled...: 09/09/10 12:38 Date Received...: 09/10/10
% Moisture.....: 31

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSTS DATE	PREP BATCH #
Percent Solids	69.3	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279271
			Dilution Factor: 1			
Total Organic Carbon	2300	1400	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-31.7L-0-4

Lab Sample ID: 200-1515-1

Date Sampled: 09/08/2010 1630

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-1.txt

Dilution: 1.0

Initial Weight/Volume: 221.6 g

Date Analyzed: 09/15/2010 1959

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.1			
Sand		64.1			
Coarse Sand		0.2			
Medium Sand		3.6			
Fine Sand		60.3			
Silt		29.4			
Clay		6.4			

> 35.8

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-31.1R-0-2

Lab Sample ID: 200-1515-2

Date Sampled: 09/08/2010 1215

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-2.txt

Dilution: 1.0

Initial Weight/Volume: 142.9 g

Date Analyzed: 09/15/2010 2002

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		64.1			
Coarse Sand		0.6			
Medium Sand		9.7			
Fine Sand		53.8			
Silt		28.2			
Clay		7.7			

35.9



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-31.4R-0-6

Lab Sample ID: 200-1515-3

Date Sampled: 09/08/2010 1520

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-3.txt

Dilution: 1.0

Initial Weight/Volume: 174.61 g

Date Analyzed: 09/15/2010 2026

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.1			
Sand		61.2			
Coarse Sand		0.4			
Medium Sand		5.0			
Fine Sand		55.8			
Silt		34.1			
Clay		4.6			

38.7

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-31-2L-0-4

Lab Sample ID: 200-1515-4

Date Sampled: 09/08/2010 1310

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-4.txt

Dilution: 1.0

Initial Weight/Volume: 105.57 g

Date Analyzed: 09/15/2010 2029

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		69.2			
Coarse Sand		0.0			
Medium Sand		1.0			
Fine Sand		68.2			
Silt		26.3			
Clay		4.5			

30.8

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-31.8-0-4

Lab Sample ID: 200-1515-5

Date Sampled: 09/08/2010 1725

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-5.txt

Dilution: 1.0

Initial Weight/Volume: 162.58 g

Date Analyzed: 09/15/2010 2032

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		54.9			
Coarse Sand		0.1			
Medium Sand		2.4			
Fine Sand		52.4			
Silt		42.2			
Clay		2.9			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-31.3-0-6

Lab Sample ID: 200-1515-6

Date Sampled: 09/08/2010 1415

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-6.txt

Dilution: 1.0

Initial Weight/Volume: 149.07 g

Date Analyzed: 09/15/2010 2035

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		3.0			
Sand		47.4			
Coarse Sand		0.9			
Medium Sand		3.9			
Fine Sand		42.6			
Silt		42.9			
Clay		6.7			

49.6

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-32.0-0-6

Lab Sample ID: 200-1515-7

Date Sampled: 09/08/2010 1900

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-7.txt

Dilution: 1.0

Initial Weight/Volume: 121.82 g

Date Analyzed: 09/15/2010 2037

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		36.7			
Coarse Sand		0.3			
Medium Sand		1.6			
Fine Sand		34.8			
Silt		55.4	63.3		
Clay		7.9			



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-32.1R-0-1

Lab Sample ID: 200-1515-8

Date Sampled: 09/09/2010 0900

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-8.txt

Dilution: 1.0

Initial Weight/Volume: 187.36 g

Date Analyzed: 09/15/2010 2040

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.5			
Sand		34.5			
Coarse Sand		0.3			
Medium Sand		1.8			
Fine Sand		32.4			
Silt		57.3			
Clay		7.7			

65.0

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-32.2L-0-1

Lab Sample ID: 200-1515-9

Date Sampled: 09/09/2010 0950

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1515-B-9.txt

Dilution: 1.0

Initial Weight/Volume:

150.52 g

Date Analyzed: 09/15/2010 2046

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.1			
Sand		22.5			
Coarse Sand		0.2			
Medium Sand		1.0			
Fine Sand		21.3			
Silt		67.5			
Clay		9.9			

77.4

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-32.3L-0-6

Lab Sample ID: 200-1515-10

Date Sampled: 09/09/2010 1045

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-10.txt

Dilution: 1.0

Initial Weight/Volume: 137.44 g

Date Analyzed: 09/15/2010 2053

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		24.5			
Coarse Sand		0.0			
Medium Sand		1.1			
Fine Sand		23.4			
Silt		67.9			
Clay		7.6			

75.5

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-33.0R-0-2

Lab Sample ID: 200-1515-11

Date Sampled: 09/09/2010 1350

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-11.txt

Dilution: 1.0

Initial Weight/Volume: 197.1 g

Date Analyzed: 09/15/2010 2056

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		3.3			
Sand		33.8			
Coarse Sand		9.6			
Medium Sand		9.3			
Fine Sand		14.9			
Silt		57.4			
Clay		5.5			

62.9

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-33.1L-0-4

Lab Sample ID: 200-1515-12

Date Sampled: 09/09/2010 1440

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-A-12.txt

Dilution: 1.0

Initial Weight/Volume: 153.66 g

Date Analyzed: 09/15/2010 2059

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		33.7			
Coarse Sand		0.4			
Medium Sand		4.7			
Fine Sand		28.6			
Silt		58.5			
Clay		7.8			

66.3

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-32.9R-0-3

Lab Sample ID: 200-1515-13

Date Sampled: 09/09/2010 1310

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-B-13.txt

Dilution: 1.0

Initial Weight/Volume: 158.02 g

Date Analyzed: 09/15/2010 2101

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		5.6			
Sand		38.7			
Coarse Sand		0.7			
Medium Sand		6.2			
Fine Sand		31.8			
Silt		51.1			
Clay		4.6			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1515-1

Sdg Number: A01130456

Client Sample ID: SD10-DUP-01

Lab Sample ID: 200-1515-14

Date Sampled: 09/09/2010 1440

Client Matrix: Solid

Date Received: 09/14/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-6642

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1515-A-14.txt

Dilution: 1.0

Initial Weight/Volume: 183.05 g

Date Analyzed: 09/16/2010 1854

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.4			
Sand		25.6			
Coarse Sand		0.2			
Medium Sand		3.8			
Fine Sand		21.6			
Silt		61.0			
Clay		13.0			

74.0

Ruettgers Organics Corporation

Client Sample ID: SD10-33.2L-0-6

GC Semivolatiles

Lot-Sample #....: A0I150590-001 Work Order #....: L62HE1AE Matrix.....: SO
 Date Sampled....: 09/13/10 10:05 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #....: 0260033
 Dilution Factor: 10 Initial Wgt/Vol: 30.02 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 44 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	120	59	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	101 DIL	(31 - 131)
Decachlorobiphenyl	104 DIL	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-33.5-0-4

GC Semivolatiles

Lot-Sample #....: A0I150590-002 Work Order #....: L62H51AE Matrix.....: SO
 Date Sampled....: 09/13/10 11:30 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #....: 0260033
 Dilution Factor: 20 Initial Wgt/Vol: 30.03 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 46 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	300	120	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94 DIL	(31 - 131)
Decachlorobiphenyl	92 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-33.6R-0-2

GC Semivolatiles

Lot-Sample #...: A01150590-003 Work Order #...: L62JA1AE Matrix.....: SO
 Date Sampled...: 09/13/10 13:15 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #...: 0260033
 Dilution Factor: 20 Initial Wgt/Vol: 30.09 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 47 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	560	120	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	110 DIL	(31 - 131)
Decachlorobiphenyl	93 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-33.7R-0-3

GC Semivolatiles

Lot-Sample #....: A0I150590-004 Work Order #....: L62JD1AE Matrix.....: SO
 Date Sampled....: 09/13/10 14:20 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #....: 0260033
 Dilution Factor: 10 Initial Wgt/Vol: 30.09 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 47 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	160 J	62	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	97 DIL	(31 - 131)
Decachlorobiphenyl	100 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rutgers Organics Corporation

Client Sample ID: SD10-DUP2

GC Semivolatiles

Lot-Sample #....: A0I150590-005 Work Order #....: L62JG1AE Matrix.....: SO
 Date Sampled....: 09/13/10 14:20 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #....: 0260033
 Dilution Factor: 1 Initial Wgt/Vol: 30.05 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 42 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	41 J	5.6	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Tetrachloro-m-xylene	89	(31 - 131)	
Decachlorobiphenyl	105	(18 - 145)	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-33.8R-0-3

GC Semivolatiles

Lot-Sample #...: A0I150590-006 Work Order #...: L62JL1AE Matrix.....: SO
 Date Sampled...: 09/13/10 15:30 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #...: 0260033
 Dilution Factor: 10 Initial Wgt/Vol: 30.11 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 60 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	170	82	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89 DIL	(31 - 131)
Decachlorobiphenyl	70 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-33.9R-0-4

GC Semivolatiles

Lot-Sample #...: A0I150590-007 Work Order #...: L62JN1AE Matrix.....: SO
 Date Sampled...: 09/13/10 16:00 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #...: 0260033
 Dilution Factor: 20 Initial Wgt/Vol: 30.02 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 56 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	260	150	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87 DIL	(31 - 131)
Decachlorobiphenyl	95 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-34.4L-0-3

GC Semivolatiles

Lot-Sample #....: A0I150590-008 Work Order #....: L62JR1AE Matrix.....: SO
 Date Sampled....: 09/14/10 10:20 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #....: 0260033
 Dilution Factor: 1 Initial Wgt/Vol: 30.02 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 49 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	16	6.5	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	67	(31 - 131)
Decachlorobiphenyl	81	(18 - 145)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-34.5R-0-7

GC Semivolatiles

Lot-Sample #....: A0I150590-009 Work Order #....: L62JW1AE Matrix.....: SO
 Date Sampled....: 09/14/10 10:55 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/24/10
 Prep Batch #....: 0260033
 Dilution Factor: 1 Initial Wgt/Vol: 30.03 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 14 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	ND	3.8	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Tetrachloro-m-xylene	70	(31 - 131)	
Decachlorobiphenyl	84	(18 - 145)	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: SD10-34.6L-0-3

GC Semivolatiles

Lot-Sample #....: A0I150590-010 Work Order #....: L62JX1AE Matrix.....: SO
 Date Sampled....: 09/14/10 11:40 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/25/10
 Prep Batch #....: 0260033
 Dilution Factor: 20 Initial Wgt/Vol: 30.1 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 48 Method.....: SW846 8081B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Mirex	190	130	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Tetrachloro-m-xylene	101 DIL	(31 - 131)
Decachlorobiphenyl	84 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-34.8R-0-3

GC Semivolatiles

Lot-Sample #....: A0I150590-011 Work Order #....: L62J21AE Matrix.....: SO
 Date Sampled....: 09/14/10 12:30 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/25/10
 Prep Batch #....: 0260033
 Dilution Factor: 20 Initial Wgt/Vol: 30.04 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 53 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	180	140	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87 DIL	(31 - 131)
Decachlorobiphenyl	97 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-34.9L-0-2

GC Semivolatiles

Lot-Sample #....: A0I150590-012	Work Order #....: L62J41AE	Matrix.....: SO
Date Sampled....: 09/14/10 13:30	Date Received...: 09/15/10	
Prep Date.....: 09/17/10	Analysis Date...: 09/22/10	
Prep Batch #....: 0260033		
Dilution Factor: 100	Initial Wgt/Vol: 30.1 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 39	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	830	540	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	105 DIL	(31 - 131)
Decachlorobiphenyl	102 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-35.1R-0-2

GC Semivolatiles

Lot-Sample #....: A0I150590-013 Work Order #....: L62J51AE Matrix.....: SO
 Date Sampled....: 09/14/10 14:10 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/25/10
 Prep Batch #....: 0260033
 Dilution Factor: 10 Initial Wgt/Vol: 30.07 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 54 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	120	71	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90 DIL	(31 - 131)
Decachlorobiphenyl	88 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-35.2L-0-1

GC Semivolatiles

Lot-Sample #....: A0I150590-014 Work Order #....: L62J61AE Matrix.....: SO
 Date Sampled....: 09/14/10 14:50 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/25/10
 Prep Batch #....: 0260033
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 53 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	170	71	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	69 DIL	(31 - 131)
Decachlorobiphenyl	84 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-36.6L-0-2

GC Semivolatiles

Lot-Sample #...: A0I150590-015 Work Order #...: L62J71AE Matrix.....: SO
 Date Sampled...: 09/14/10 18:25 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/25/10
 Prep Batch #...: 0260033
 Dilution Factor: 20 Initial Wgt/Vol: 30.06 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 49 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	540	130	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	104 DIL	(31 - 131)
Decachlorobiphenyl	100 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-33.8C-0-2

GC Semivolatiles

Lot-Sample #...: A0I150590-016	Work Order #...: L62J81AE	Matrix.....: SO
Date Sampled...: 09/13/10 15:15	Date Received...: 09/15/10	
Prep Date.....: 09/17/10	Analysis Date...: 09/25/10	
Prep Batch #...: 0260033		
Dilution Factor: 20	Initial Wgt/Vol: 30.03 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 23	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	130	86	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	106 DIL	(31 - 131)
Decachlorobiphenyl	111 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-35.4C-0-4

GC Semivolatiles

Lot-Sample #....: A0I150590-017 Work Order #....: L62J91AE Matrix.....: SO
 Date Sampled....: 09/14/10 15:55 Date Received...: 09/15/10
 Prep Date.....: 09/17/10 Analysis Date...: 09/22/10
 Prep Batch #....: 0260033
 Dilution Factor: 100 Initial Wgt/Vol: 30.03 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 26 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	1100	450	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	104 DIL	(31 - 131)
Decachlorobiphenyl	114 DIL	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-33.2L-0-6

General Chemistry

Lot-Sample #....: A0I150590-001 Work Order #....: L62HE Matrix.....: SO
 Date Sampled....: 09/13/10 10:05 Date Received...: 09/15/10
 % Moisture.....: 44

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	56.4	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
Dilution Factor: 1						
Total Organic Carbon	11000	1800	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
Dilution Factor: 1						

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-33.5-0-4

General Chemistry

Lot-Sample #....: A0I150590-002 Work Order #....: L62H5 Matrix.....: SO
 Date Sampled...: 09/13/10 11:30 Date Received...: 09/15/10
 % Moisture.....: 46

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	53.6	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
				Dilution Factor: 1		
Total Organic Carbon	18000	1900	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
				Dilution Factor: 1		

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-33.6R-0-2

General Chemistry

Lot-Sample #...: A0I150590-003 Work Order #...: L62JA Matrix.....: SO
 Date Sampled...: 09/13/10 13:15 Date Received...: 09/15/10
 % Moisture.....: 47

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	52.9	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
		Dilution Factor: 1				
Total Organic Carbon	15000	1900	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
		Dilution Factor: 1				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Rutgers Organics Corporation

Client Sample ID: SD10-33.7R-0-3

General Chemistry

Lot-Sample #....: AOI150590-004 Work Order #....: L62JD Matrix.....: SO
Date Sampled...: 09/13/10 14:20 Date Received...: 09/15/10
% Moisture.....: 47

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	53.0	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
			Dilution Factor: 1			
Total Organic Carbon	21000	1900	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-DUP2

General Chemistry

Lot-Sample #....: A0I150590-005 Work Order #....: L62JG Matrix.....: SO
Date Sampled...: 09/13/10 14:20 Date Received...: 09/15/10
% Moisture.....: 42

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	58.5	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
			Dilution Factor: 1			
Total Organic Carbon	16000	1700	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-33.8R-0-3

General Chemistry

Lot-Sample #....: AOI150590-006 Work Order #....: L62JL Matrix.....: SO
Date Sampled....: 09/13/10 15:30 Date Received...: 09/15/10
% Moisture.....: 60

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	40.3	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
			Dilution Factor: 1			
Total Organic Carbon	11000	2500	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-33.9R-0-4

General Chemistry

Lot-Sample #....: A0I150590-007 Work Order #....: L62JN Matrix.....: SO
 Date Sampled...: 09/13/10 16:00 Date Received...: 09/15/10
 % Moisture.....: 56

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	44.3	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
				Dilution Factor: 1		
Total Organic Carbon	27000	2300	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
				Dilution Factor: 1		

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-34.4L-0-3

General Chemistry

Lot-Sample #...: A0I150590-008 Work Order #...: L62JR Matrix.....: SO
 Date Sampled...: 09/14/10 10:20 Date Received...: 09/15/10
 % Moisture.....: 49

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	50.8	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
		Dilution Factor: 1				
Total Organic Carbon	16000	2000	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Rutgers Organics Corporation

Client Sample ID: SD10-34.5R-0-7

General Chemistry

Lot-Sample #...: A0I150590-009 Work Order #...: L62JW Matrix.....: SO
Date Sampled...: 09/14/10 10:55 Date Received...: 09/15/10
% Moisture.....: 14

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	85.7	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
		Dilution Factor: 1				
Total Organic Carbon	3000	1200	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-34.6L-0-3

General Chemistry

Lot-Sample #....: A0I150590-010 Work Order #....: L62JX Matrix.....: SO
Date Sampled....: 09/14/10 11:40 Date Received...: 09/15/10
% Moisture.....: 48

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	51.7	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
			Dilution Factor: 1			
Total Organic Carbon	17000	1900	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265142
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-34.8R-0-3

General Chemistry

Lot-Sample #....: A01150590-011 Work Order #....: L62J2 Matrix.....: SO
Date Sampled....: 09/14/10 12:30 Date Received...: 09/15/10
% Moisture.....: 53

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	47.4	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
			Dilution Factor: 1			
Total Organic Carbon	24000	2100	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265144
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-34.9L-0-2

General Chemistry

Lot-Sample #...: A0I150590-012 Work Order #...: L62J4 Matrix.....: SO
Date Sampled...: 09/14/10 13:30 Date Received...: 09/15/10
% Moisture.....: 39

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	60.6	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
			Dilution Factor: 1			
Total Organic Carbon	19000	1700	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265144
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-35.1R-0-2

General Chemistry

Lot-Sample #....: A0I150590-013 Work Order #....: L62J5 Matrix.....: SO
Date Sampled....: 09/14/10 14:10 Date Received...: 09/15/10
% Moisture.....: 54

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	46.3	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
			Dilution Factor: 1			
Total Organic Carbon	23000	2200	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265144
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-35.2L-0-1

General Chemistry

Lot-Sample #....: A0I150590-014 Work Order #....: L62J6 Matrix.....: SO
Date Sampled....: 09/14/10 14:50 Date Received...: 09/15/10
% Moisture.....: 53

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	46.5	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259267
			Dilution Factor: 1			
Total Organic Carbon	23000	2100	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265144
			Dilution Factor: 1			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-36.6L-0-2

General Chemistry

Lot-Sample #...: A0I150590-015 Work Order #...: L62J7 Matrix.....: SO
 Date Sampled...: 09/14/10 18:25 Date Received...: 09/15/10
 % Moisture.....: 49

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	50.8	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259296
		Dilution Factor: 1				
Total Organic Carbon	15000	2000	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265144
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Rutgers Organics Corporation

Client Sample ID: SD10-33.8C-0-2

General Chemistry

Lot-Sample #....: A01150590-016 Work Order #....: L62J8 Matrix.....: SO
Date Sampled....: 09/13/10 15:15 Date Received...: 09/15/10
% Moisture.....: 23

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	76.5	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259296
			Dilution Factor: 1			
Total Organic Carbon	2500	1300	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265144
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-35.4C-0-4

General Chemistry

Lot-Sample #....: A01150590-017 Work Order #....: L62J9 Matrix.....: SO
Date Sampled....: 09/14/10 15:55 Date Received...: 09/15/10
% Moisture.....: 26

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	73.9	10.0	%	MCAWW 160.3 MOD	09/16-09/17/10	0259296
			Dilution Factor: 1			
Total Organic Carbon	3500	1400	mg/kg	MSA WALKLEY-BLACK	09/22/10	0265144
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-33.2L-0-6

Lab Sample ID: 200-1566-1

Date Sampled: 09/13/2010 1005

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-A-1.txt

Dilution: 1.0

Initial Weight/Volume: 120.58 g

Date Analyzed: 09/17/2010 1740

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		50.2			
Coarse Sand		0.5			
Medium Sand		2.0			
Fine Sand		47.7			
Silt		45.0			
Clay		4.8			

49.8



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-33.5-0-4

Lab Sample ID: 200-1566-2

Date Sampled: 09/13/2010 1130

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-A-2.txt

Dilution: 1.0

Initial Weight/Volume: 117.78 g

Date Analyzed: 09/17/2010 1742

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		4.3			
Sand		57.2			
Coarse Sand		1.5			
Medium Sand		6.8			
Fine Sand		48.9			
Silt		30.0			
Clay		8.5			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-33.6R-0-2

Lab Sample ID: 200-1566-3

Date Sampled: 09/13/2010 1315

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-B-3.txt

Dilution: 1.0

Initial Weight/Volume: 101.43 g

Date Analyzed: 09/17/2010 1745

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		55.6			
Coarse Sand		0.0			
Medium Sand		4.0			
Fine Sand		51.6			
Silt		37.1			
Clay		7.3			

44.4

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-33.7R-0-3

Lab Sample ID: 200-1566-4

Date Sampled: 09/13/2010 1420

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-A-4.txt

Dilution: 1.0

Initial Weight/Volume: 90.34 g

Date Analyzed: 09/17/2010 1747

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.3			
Sand		46.7			
Coarse Sand		0.4			
Medium Sand		2.9			
Fine Sand		43.4			
Silt		47.6			
Clay		5.4			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-DUP2

Lab Sample ID: 200-1566-5

Date Sampled: 09/13/2010 1420

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-C-5.txt

Dilution: 1.0

Initial Weight/Volume: 97.09 g

Date Analyzed: 09/17/2010 1749

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		47.2			
Coarse Sand		1.0			
Medium Sand		3.1			
Fine Sand		43.1			
Silt		44.7			
Clay		8.1			

528

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-33.8R-0-3

Lab Sample ID: 200-1566-6

Date Sampled: 09/13/2010 1530

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1566-A-6.txt

Dilution: 1.0

Initial Weight/Volume:

109.35 g

Date Analyzed: 09/17/2010 1751

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		30.3			
Coarse Sand		0.6			
Medium Sand		4.9			
Fine Sand		24.8			
Silt		59.3			
Clay		10.4			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-33.9R-0-4

Lab Sample ID: 200-1566-7

Date Sampled: 09/13/2010 1600

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-B-7.txt

Dilution: 1.0

Initial Weight/Volume: 90.11 g

Date Analyzed: 09/17/2010 1753

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		29.3			
Coarse Sand		0.0			
Medium Sand		0.5			
Fine Sand		28.8			
Silt		62.7			
Clay		8.0			

70.7

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-34.4L-0-3

Lab Sample ID: 200-1566-8

Date Sampled: 09/14/2010 1020

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-A-8.txt

Dilution: 1.0

Initial Weight/Volume: 92.5 g

Date Analyzed: 09/17/2010 1754

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		52.0			
Coarse Sand		0.9			
Medium Sand		5.1			
Fine Sand		46.0			
Silt		42.4			
Clay		5.6			

48.0



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-34.5R-0-7

Lab Sample ID: 200-1566-9

Date Sampled: 09/14/2010 1055

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-B-9.txt

Dilution: 1.0

Initial Weight/Volume: 65.88 g

Date Analyzed: 09/17/2010 1756

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		15.5			
Sand		35.9			
Coarse Sand		5.0			
Medium Sand		8.7			
Fine Sand		22.2			
Silt		34.1			
Clay		14.5			

48.6

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-34.6L-0-3

Lab Sample ID: 200-1566-10

Date Sampled: 09/14/2010 1140

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-A-10.txt

Dilution: 1.0

Initial Weight/Volume: 97.36 g

Date Analyzed: 09/17/2010 1757

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.1			
Sand		53.5			
Coarse Sand		0.3			
Medium Sand		1.3			
Fine Sand		51.9			
Silt		40.6			
Clay		5.8			

46.4

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-34.8R-0-3

Lab Sample ID: 200-1566-11

Date Sampled: 09/14/2010 1230

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-C-11.txt

Dilution: 1.0

Initial Weight/Volume: 107.1 g

Date Analyzed: 09/17/2010 1800

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		30.8			
Coarse Sand		0.0			
Medium Sand		1.4			
Fine Sand		29.4			
Silt		56.4			
Clay		12.8			

69.2



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-34.9L-0-2

Lab Sample ID: 200-1566-12

Date Sampled: 09/14/2010 1330

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-B-12.txt

Dilution: 1.0

Initial Weight/Volume: 93.32 g

Date Analyzed: 09/17/2010 1814

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		57.1			
Coarse Sand		1.6			
Medium Sand		5.5			
Fine Sand		50.0			
Silt		33.8			
Clay		9.1			

42.9

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-35.1R-0-2

Lab Sample ID: 200-1566-13

Date Sampled: 09/14/2010 1410

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-A-13.txt

Dilution: 1.0

Initial Weight/Volume: 82.38 g

Date Analyzed: 09/17/2010 1816

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		45.4			
Coarse Sand		0.0			
Medium Sand		4.1			
Fine Sand		41.3			
Silt		43.4			
Clay		11.2			

54.6

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-35.2L-0-1

Lab Sample ID: 200-1566-14

Date Sampled: 09/14/2010 1450

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-B-14.txt

Dilution: 1.0

Initial Weight/Volume: 97.83 g

Date Analyzed: 09/17/2010 1818

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.4			
Sand		45.9			
Coarse Sand		0.5			
Medium Sand		4.9			
Fine Sand		40.5			
Silt		45.1			
Clay		8.6			

53.7

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-36.6L-0-2

Lab Sample ID: 200-1566-15

Date Sampled: 09/14/2010 1825

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-A-15.txt

Dilution: 1.0

Initial Weight/Volume: 87.74 g

Date Analyzed: 09/17/2010 1820

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		54.8			
Coarse Sand		0.0			
Medium Sand		4.8			
Fine Sand		50.0			
Silt		36.1			
Clay		9.1			

45.2



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-33.8C-0-2

Lab Sample ID: 200-1566-16

Date Sampled: 09/13/2010 1515

Client Matrix: Solid

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-B-16.txt

Dilution: 1.0

Initial Weight/Volume: 134.93 g

Date Analyzed: 09/17/2010 1822

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.3			
Sand		95.9			
Coarse Sand		0.3			
Medium Sand		11.8			
Fine Sand		83.8			
Silt		2.8			
Clay		0.9			

99.9%



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1566-1

Sdg Number: A01150590

Client Sample ID: SD10-35.4C-0-4

Lab Sample ID: 200-1566-17

Client Matrix: Solid

Date Sampled: 09/14/2010 1555

Date Received: 09/17/2010 1000

D422 Grain Size

Method: D422

Analysis Batch: 200-6696

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1566-B-17.txt

Dilution: 1.0

Initial Weight/Volume: 188.3 g

Date Analyzed: 09/17/2010 1824

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		1.8			
Sand		92.9			
Coarse Sand		2.6			
Medium Sand		21.2			
Fine Sand		69.1			
Silt		3.6			
Clay		1.7			

Ruettgers Organics Corporation

Client Sample ID: SD10-35.7R-0-2

GC Semivolatiles

Lot-Sample #....: A0I160575-001 Work Order #....: L64EC1AE Matrix.....: SO
 Date Sampled....: 09/15/10 09:10 Date Received...: 09/16/10
 Prep Date.....: 09/21/10 Analysis Date...: 09/25/10
 Prep Batch #....: 0264032
 Dilution Factor: 10 Initial Wgt/Vol: 30.11 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 48 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	130	64	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85 DIL	(31 - 131)
Decachlorobiphenyl	97 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: SD10-35.8R-0-1

GC Semivolatiles

Lot-Sample #....: A0I160575-002	Work Order #....: L64EG1AE	Matrix.....: SO
Date Sampled....: 09/15/10 09:50	Date Received...: 09/16/10	
Prep Date.....: 09/21/10	Analysis Date...: 09/25/10	
Prep Batch #....: 0264032		
Dilution Factor: 10	Initial Wgt/Vol: 30.1 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 45	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Mirex	210	61	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Tetrachloro-m-xylene	85 DIL	(31 - 131)
Decachlorobiphenyl	95 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-35.9R-0-2

GC Semivolatiles

Lot-Sample #...: A0I160575-003	Work Order #...: L64EK1AE	Matrix.....: SO
Date Sampled...: 09/15/10 10:25	Date Received...: 09/16/10	
Prep Date.....: 09/21/10	Analysis Date...: 09/25/10	
Prep Batch #...: 0264032		
Dilution Factor: 10	Initial Wgt/Vol: 30.14 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 61	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	130	84	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	78 DIL	(31 - 131)
Decachlorobiphenyl	90 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-36.0L-0-2

GC Semivolatiles

Lot-Sample #....: A0I160575-004	Work Order #....: L64EM1AE	Matrix.....: SO
Date Sampled....: 09/15/10 11:05	Date Received...: 09/16/10	
Prep Date.....: 09/21/10	Analysis Date...: 09/25/10	
Prep Batch #....: 0264032		
Dilution Factor: 10	Initial Wgt/Vol: 30.09 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 56	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	100	75	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	78 DIL	(31 - 131)
Decachlorobiphenyl	86 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-36.1L-0-1

GC Semivolatiles

Lot-Sample #...: A0I160575-005	Work Order #...: L64EN1AE	Matrix.....: SO
Date Sampled...: 09/15/10 11:54	Date Received...: 09/16/10	
Prep Date.....: 09/21/10	Analysis Date...: 09/27/10	
Prep Batch #...: 0264032		
Dilution Factor: 5	Initial Wgt/Vol: 30.19 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 62	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	69 J	44	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	50 DIL	(31 - 131)
Decachlorobiphenyl	77 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-DUP3

GC Semivolatiles

Lot-Sample #...: A0I160575-006 Work Order #...: L64EP1AE Matrix.....: SO
Date Sampled...: 09/15/10 11:54 Date Received...: 09/16/10
Prep Date.....: 09/21/10 Analysis Date...: 09/25/10
Prep Batch #...: 0264032
Dilution Factor: 10 Initial Wgt/Vol: 30.04 g Final Wgt/Vol...: 10 mL
% Moisture.....: 62 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	290 J	87	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	46 DIL	(31 - 131)
Decachlorobiphenyl	72 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-36.2R-0-1

GC Semivolatiles

Lot-Sample #....: A0I160575-007 Work Order #....: L64EQ1AJ Matrix.....: SO
 Date Sampled....: 09/15/10 12:35 Date Received...: 09/16/10
 Prep Date.....: 09/21/10 Analysis Date...: 09/25/10
 Prep Batch #....: 0264032
 Dilution Factor: 10 Initial Wgt/Vol: 30.17 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 47 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	140	63	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	60 DIL	(31 - 131)
Decachlorobiphenyl	62 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-36.3L-0-1

GC Semivolatiles

Lot-Sample #....: A0I160575-008	Work Order #....: L64ER1AE	Matrix.....: SO
Date Sampled....: 09/15/10 13:25	Date Received...: 09/16/10	
Prep Date.....: 09/21/10	Analysis Date...: 09/27/10	
Prep Batch #....: 0264032		
Dilution Factor: 5	Initial Wgt/Vol: 30.2 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 58	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	65	39	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	47 DIL	(31 - 131)
Decachlorobiphenyl	81 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-36.4L-0-2

GC Semivolatiles

Lot-Sample #....: A0I160575-009 Work Order #....: L64ET1AE Matrix.....: SO
 Date Sampled....: 09/15/10 14:00 Date Received...: 09/16/10
 Prep Date.....: 09/21/10 Analysis Date...: 09/25/10
 Prep Batch #....: 0264032
 Dilution Factor: 10 Initial Wgt/Vol: 30.06 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 47 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	120	62	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	52 DIL	(31 - 131)
Decachlorobiphenyl	65 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: SD10-37.0-0-2

GC Semivolatiles

Lot-Sample #....: A0I160575-010 Work Order #....: L64EV1AE Matrix.....: SO
 Date Sampled....: 09/15/10 16:23 Date Received...: 09/16/10
 Prep Date.....: 09/21/10 Analysis Date...: 09/27/10
 Prep Batch #....: 0264032
 Dilution Factor: 2 Initial Wgt/Vol: 30.17 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 51 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	24	14	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Tetrachloro-m-xylene	54	(31 - 131)	
Decachlorobiphenyl	85	(18 - 145)	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-37.1R-0-2

GC Semivolatiles

Lot-Sample #...: A0I160575-011 Work Order #...: L64EW1AE Matrix.....: SO
 Date Sampled...: 09/15/10 16:46 Date Received...: 09/16/10
 Prep Date.....: 09/21/10 Analysis Date...: 09/27/10
 Prep Batch #...: 0264032
 Dilution Factor: 5 Initial Wgt/Vol: 30.06 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 66 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	75	49	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Tetrachloro-m-xylene	49 DIL	(31 - 131)	
Decachlorobiphenyl	80 DIL	(18 - 145)	

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: SD10-37.2-0-12

GC Semivolatiles

Lot-Sample #...: A0I160575-012 Work Order #...: L64EX1AE Matrix.....: SO
 Date Sampled...: 09/15/10 17:35 Date Received...: 09/16/10
 Prep Date.....: 09/21/10 Analysis Date...: 09/27/10
 Prep Batch #...: 0264032
 Dilution Factor: 2 Initial Wgt/Vol: 30.06 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 64 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	37 J	19	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	26 *	(31 - 131)
Decachlorobiphenyl	32	(18 - 145)

NOTE(S) :

* Surrogate recovery is outside stated control limits.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-37.3R-0-6

GC Semivolatiles

Lot-Sample #....: A0I160575-013 Work Order #....: L64E01AJ Matrix.....: SO
 Date Sampled....: 09/16/10 08:50 Date Received...: 09/16/10
 Prep Date.....: 09/21/10 Analysis Date...: 09/25/10
 Prep Batch #....: 0264032
 Dilution Factor: 10 Initial Wgt/Vol: 30.07 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 66 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	190	98	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	57 DIL	(31 - 131)
Decachlorobiphenyl	80 DIL	(18 - 145)

NOTE(S) :

DIL. The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-37.4R-0-4

GC Semivolatiles

Lot-Sample #....: A0I160575-014	Work Order #....: L64E11AE	Matrix.....: SO
Date Sampled....: 09/16/10 09:30	Date Received...: 09/16/10	
Prep Date.....: 09/21/10	Analysis Date...: 09/25/10	
Prep Batch #....: 0264032		
Dilution Factor: 10	Initial Wgt/Vol: 30.19 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 68	Method.....: SW846 8081B	

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Mirex	260	100	ug/kg
		PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS	
Tetrachloro-m-xylene	64 DIL	(31 - 131)	
Decachlorobiphenyl	91 DIL	(18 - 145)	

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-37.5R-0-6

GC Semivolatiles

Lot-Sample #....: A0I160575-015 Work Order #....: L64E21AE Matrix.....: SO
 Date Sampled...: 09/16/10 10:10 Date Received...: 09/16/10
 Prep Date.....: 09/21/10 Analysis Date...: 09/25/10
 Prep Batch #....: 0264032
 Dilution Factor: 10 Initial Wgt/Vol: 30.07 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 68 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	800 J	100	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Tetrachloro-m-xylene	65 DIL	(31 - 131)	
Decachlorobiphenyl	79 DIL	(18 - 145)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-DUP4

GC Semivolatiles

Lot-Sample #...: A0I160575-016 Work Order #...: L64E31AE Matrix.....: SO
 Date Sampled...: 09/16/10 10:10 Date Received...: 09/16/10
 Prep Date.....: 09/21/10 Analysis Date...: 09/25/10
 Prep Batch #...: 0264032
 Dilution Factor: 10 Initial Wgt/Vol: 30.1 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 67 Method.....: SW846 8081B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>UNITS</u>
Mirex	350 J	100	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Tetrachloro-m-xylene	82 DIL	(31 - 131)
Decachlorobiphenyl	88 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: SD10-37.6-0-3

GC Semivolatiles

Lot-Sample #....: A0I160575-017 Work Order #....: L64E41AE Matrix.....: SO
Date Sampled....: 09/16/10 11:00 Date Received...: 09/16/10
Prep Date.....: 09/21/10 Analysis Date...: 09/27/10
Prep Batch #....: 0264032
Dilution Factor: 1 Initial Wgt/Vol: 30.15 g Final Wgt/Vol...: 10 mL
% Moisture.....: 53 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	ND	7.1	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	52	(31 - 131)
Decachlorobiphenyl	74	(18 - 145)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: SD10-35.7R-0-2

General Chemistry

Lot-Sample #....: A0I160575-001 Work Order #....: L64EC Matrix.....: SO
Date Sampled....: 09/15/10 09:10 Date Received...: 09/16/10
% Moisture.....: 48

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	51.8	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
Dilution Factor: 1						
Total Organic Carbon	12000	1900	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
Dilution Factor: 1						

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Client Sample ID: SD10-35.8R-0-1

Lot-Sample #....: A01160575-002 Work Order #....: L64EG Matrix.....: SO
Date Sampled...: 09/15/10 09:50 Date Received..: 09/16/10
% Moisture.....: 45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Percent Solids	54.5	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
	Dilution Factor: 1					
Total Organic Carbon	14000	1800	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
	Dilution Factor: 1					

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-35.9R-0-2

General Chemistry

Lot-Sample #...: A01160575-003 Work Order #...: L64EK Matrix.....: SO
Date Sampled...: 09/15/10 10:25 Date Received...: 09/16/10
% Moisture.....: 61

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	39.1	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
				Dilution Factor: 1		
Total Organic Carbon	32000	2600	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
				Dilution Factor: 1		

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-36.0L-0-2

General Chemistry

Lot-Sample #...: A0I160575-004 Work Order #...: L64EM Matrix.....: SO
Date Sampled...: 09/15/10 11:05 Date Received...: 09/16/10
% Moisture.....: 56

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	43.9	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
			Dilution Factor: 1			
Total Organic Carbon	21000	2300	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 1			

NOTE (S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Client Sample ID: SD10-36.1L-0-1

Lot-Sample #.... A0I160575-005 Work Order #.... L64EN Matrix.....: SO
Date Sampled.... 09/15/10 11:54 Date Received..: 09/16/10
% Moisture..... 62

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	37.6	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
	Dilution Factor: 1					
Total Organic Carbon	33000	2700	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
	Dilution Factor: 1					

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Rutgers Organics Corporation

Client Sample ID: SD10-DUP3

General Chemistry

Lot-Sample #...: A01160575-006 Work Order #...: L64EP Matrix.....: SO
Date Sampled...: 09/15/10 11:54 Date Received...: 09/16/10
% Moisture.....: 62

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	38.1	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
			Dilution Factor: 1			
Total Organic Carbon	34000	2600	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 1			

NOTE (S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Client Sample ID: SD10-36.2R-0-1

Lot-Sample #...: A0I160575-007 Work Order #...: L64EQ Matrix.....: SO
Date Sampled...: 09/15/10 12:35 Date Received..: 09/16/10
% Moisture.....: 47

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	52.5	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
	Dilution Factor: 1					
Total Organic Carbon	23000	1900	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
	Dilution Factor: 1					

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-36.3L-0-1

General Chemistry

Lot-Sample #...: A0I160575-008 Work Order #...: L64ER Matrix.....: SO
Date Sampled...: 09/15/10 13:25 Date Received...: 09/16/10
% Moisture.....: 58

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	42.2	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
			Dilution Factor: 1			
Total Organic Carbon	31000	2400	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-36.4L-0-2

General Chemistry

Lot-Sample #...: A01160575-009 Work Order #...: L64ET Matrix.....: SO
Date Sampled...: 09/15/10 14:00 Date Received...: 09/16/10
% Moisture.....: 47

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	53.1	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
			Dilution Factor: 1			
Total Organic Carbon	17000	1900	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Client Sample ID: SD10-37.0-0-2

Lot-Sample #...: A0I160575-010 Work Order #...: L64EV Matrix.....: SO
Date Sampled...: 09/15/10 16:23 Date Received...: 09/16/10
% Moisture.....: 51

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	48.9	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
		Dilution Factor: 1				
Total Organic Carbon	20000	2000	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
		Dilution Factor: 1				

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-37.1R-0-2

General Chemistry

Lot-Sample #...: A0I160575-011 Work Order #...: L64EW Matrix.....: SO
Date Sampled...: 09/15/10 16:46 Date Received...: 09/16/10
% Moisture.....: 66

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	33.7	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
			Dilution Factor: 1			
Total Organic Carbon	35000	3000	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-37.2-0-12

General Chemistry

Lot-Sample #...: A0I160575-012 Work Order #...: L64EX Matrix.....: SO
Date Sampled...: 09/15/10 17:35 Date Received...: 09/16/10
% Moisture.....: 64

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	35.6	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
			Dilution Factor: 1			
Total Organic Carbon	35000	2800	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 1			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-37.3R-0-6

General Chemistry

Lot-Sample #...: A0I160575-013 Work Order #...: L64E0 Matrix.....: SO
Date Sampled...: 09/16/10 08:50 Date Received...: 09/16/10
% Moisture.....: 66

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	33.7	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263205
			Dilution Factor: 1			
Total Organic Carbon	37000	3000	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 1			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-37.4R-0-4

General Chemistry

Lot-Sample #...: A0I160575-014 Work Order #...: L64E1 Matrix.....: SO
Date Sampled...: 09/16/10 09:30 Date Received...: 09/16/10
% Moisture.....: 68

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	32.2	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
			Dilution Factor: 1			
Total Organic Carbon	43000	6200	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 2			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-37.5R-0-6

General Chemistry

Lot-Sample #...: A0I160575-015 Work Order #...: L64E2 Matrix.....: SO
Date Sampled...: 09/16/10 10:10 Date Received...: 09/16/10
% Moisture.....: 68

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	32.2	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263164
			Dilution Factor: 1			
Total Organic Carbon	48000	6200	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 2			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-DUP4

General Chemistry

Lot-Sample #...: A0I160575-016 Work Order #...: L64E3 Matrix.....: SO
Date Sampled...: 09/16/10 10:10 Date Received...: 09/16/10
% Moisture.....: 67

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	32.8	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263205
			Dilution Factor: 1			
Total Organic Carbon	49000	6100	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 2			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-37.6-0-3

General Chemistry

Lot-Sample #...: A0I160575-017 Work Order #...: L64E4 Matrix.....: SO
Date Sampled...: 09/16/10 11:00 Date Received...: 09/16/10
% Moisture.....: 53

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	46.7	10.0	%	MCAWW 160.3 MOD	09/20-09/21/10	0263205
			Dilution Factor: 1			
Total Organic Carbon	21000	2100	mg/kg	MSA WALKLEY-BLACK	09/23/10	0266079
			Dilution Factor: 1			

NOTE (S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

SAMPLE SUMMARY

A01160575

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L64EC	001	SD10-35.7R-0-2	09/15/10	09:10
L64EG	002	SD10-35.8R-0-1	09/15/10	09:50
L64EK	003	SD10-35.9R-0-2	09/15/10	10:25
L64EM	004	SD10-36.0L-0-2	09/15/10	11:05
L64EN	005	SD10-36.1L-0-1	09/15/10	11:54
L64EP	006	SD10-DUP3	09/15/10	11:54
L64EQ	007	SD10-36.2R-0-1	09/15/10	12:35
L64ER	008	SD10-36.3L-0-1	09/15/10	13:25
L64ET	009	SD10-36.4L-0-2	09/15/10	14:00
L64EV	010	SD10-37.0-0-2	09/15/10	16:23
L64EW	011	SD10-37.1R-0-2	09/15/10	16:46
L64EX	012	SD10-37.2-0-12	09/15/10	17:35
L64E0	013	SD10-37.3R-0-6	09/16/10	08:50
L64E1	014	SD10-37.4R-0-4	09/16/10	09:30
L64E2	015	SD10-37.5R-0-6	09/16/10	10:10
L64E3	016	SD10-DUP4	09/16/10	10:10
L64E4	017	SD10-37.6-0-3	09/16/10	11:00

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A0160575

Client Sample ID: ~~L64EC~~ S10-35.7R-0-2

Lab Sample ID: 200-1593-1

Date Sampled: 09/15/2010 0910

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-C-1.txt

Dilution: 1.0

Initial Weight/Volume: 126.29 g

Date Analyzed: 09/20/2010 2046

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		59.6			
Coarse Sand		0.8			
Medium Sand		7.2			
Fine Sand		51.6			
Silt		37.0			
Clay		3.4			

> 40.4

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A0160575

Client Sample ID: ~~L64EG~~ S10-35.8R-0-1

Lab Sample ID: 200-1593-2

Date Sampled: 09/15/2010 0950

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method:	D422	Analysis Batch:	200-6898	Instrument ID:	D422_import
Preparation:	N/A			Lab File ID:	200-1593-C-2.txt
Dilution:	1.0			Initial Weight/Volume:	206.27 g
Date Analyzed:	09/20/2010 2048			Final Weight/Volume:	
Date Prepared:					

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.4			
Sand		48.5			
Coarse Sand		1.0			
Medium Sand		6.8			
Fine Sand		40.7			
Silt		44.1			
Clay		7.0			

> 51.1

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A0160575

Client Sample ID: L64EK ~~SB~~10-35.9R-0-2

Lab Sample ID: 200-1593-3

Date Sampled: 09/15/2010 1025

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-C-3.txt

Dilution: 1.0

Initial Weight/Volume: 229.39 g

Date Analyzed: 09/20/2010 2051

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		24.7			
Coarse Sand		0.1			
Medium Sand		1.6			
Fine Sand		23.0			
Silt		70.4			
Clay		5.0			

> 75.4

100.1%

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A0160575

Client Sample ID: L64EM SD10-36.0L-0-2

Lab Sample ID: 200-1593-4

Date Sampled: 09/15/2010 1105

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-C-4.txt

Dilution: 1.0

Initial Weight/Volume: 302.06 g

Date Analyzed: 09/20/2010 2056

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		39.8			
Coarse Sand		0.2			
Medium Sand		4.2			
Fine Sand		35.4			
Silt		53.9			
Clay		6.3			

7 60.2

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A01160575

Client Sample ID: L64EN SD10-36.1 L-0-1

Lab Sample ID: 200-1593-5

Date Sampled: 09/15/2010 1154

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-C-5.txt

Dilution: 1.0

Initial Weight/Volume: 122.66 g

Date Analyzed: 09/20/2010 2059

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		16.3			
Coarse Sand		0.1			
Medium Sand		0.3			
Fine Sand		15.9			
Silt		68.2			
Clay		15.5			

7 83.7

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A01160575

Client Sample ID: L64EP SD10-DUP3

Lab Sample ID: 200-1593-6

Date Sampled: 09/15/2010 1154

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-B-6.txt

Dilution: 1.0

Initial Weight/Volume: 120.08 g

Date Analyzed: 09/20/2010 2138

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		15.1			
Coarse Sand		0.0			
Medium Sand		0.3			
Fine Sand		14.8			
Silt		68.8			
Clay		16.1			

> 84.9

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A01160575

Client Sample ID: L64EQ SD10-36.2R-0-1

Lab Sample ID: 200-1593-7

Date Sampled: 09/15/2010 1235

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-G-7.txt

Dilution: 1.0

Initial Weight/Volume: 196.41 g

Date Analyzed: 09/20/2010 2141

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		36.7			
Coarse Sand		0.5			
Medium Sand		1.9			
Fine Sand		34.3			
Silt		55.2			
Clay		8.1			

> 63.3



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A01160575

Client Sample ID: L64ER SD10 -36.3L-0-1

Lab Sample ID: 200-1593-8

Date Sampled: 09/15/2010 1325

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-C-8.txt

Dilution: 1.0

Initial Weight/Volume: 204.62 g

Date Analyzed: 09/20/2010 2147

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		27.8			
Coarse Sand		0.3			
Medium Sand		2.3			
Fine Sand		25.2			
Silt		63.0			
Clay		9.2			

> 72.2

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A0160575

Client Sample ID: L6451 SD10-36.4L-0-2

Lab Sample ID: 200-1593-9

Date Sampled: 09/15/2010 1400

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1593-C-9.txt

Dilution: 1.0

Initial Weight/Volume:

204.69 g

Date Analyzed: 09/20/2010 2150

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		47.4			
Coarse Sand		0.2			
Medium Sand		1.7			
Fine Sand		45.5			
Silt		46.6			
Clay		6.0			

7 52.6

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A0160575

Client Sample ID: ~~L64EV~~ SD10-37.0-0-2

Lab Sample ID: 200-1593-10

Date Sampled: 09/15/2010 1623

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-C-10.txt

Dilution: 1.0

Initial Weight/Volume: 241.9 g

Date Analyzed: 09/20/2010 2153

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		53.0			
Coarse Sand		0.5			
Medium Sand		4.4			
Fine Sand		48.1			
Silt		42.2			
Clay		4.8	7	47.0	

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A0160575

Client Sample ID: L64EW SD10 -37.1R-0-2

Lab Sample ID: 200-1593-11

Date Sampled: 09/15/2010 1646

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method:	D422	Analysis Batch: 200-6898	Instrument ID:	D422_import
Preparation:	N/A		Lab File ID:	200-1593-C-11.txt
Dilution:	1.0		Initial Weight/Volume:	177.84 g
Date Analyzed:	09/20/2010 2156		Final Weight/Volume:	
Date Prepared:				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		15.9			
Coarse Sand		0.0			
Medium Sand		1.6			
Fine Sand		14.3			
Silt		73.5			
Clay		10.6	7	84.1	

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A01160575

Client Sample ID: L64EX SD 10-37.2-0-12

Lab Sample ID: 200-1593-12

Date Sampled: 09/15/2010 1735

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-C-12.txt

Dilution: 1.0

Initial Weight/Volume: 233.27 g

Date Analyzed: 09/20/2010 2219

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		22.9			
Coarse Sand		0.0			
Medium Sand		0.7			
Fine Sand		22.2			
Silt		70.8			
Clay		6.3			

> 77.1

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A01160575

Client Sample ID:

~~L64E0~~ SD10-37.3R-0-6

Lab Sample ID:

200-1593-13

Date Sampled: 09/16/2010 0850

Client Matrix:

Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID:

D422_import

Preparation:

N/A

Lab File ID:

200-1593-G-13.txt

Dilution:

1.0

Initial Weight/Volume:

215.87 g

Date Analyzed:

09/20/2010 2222

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.6			
Sand		38.4			
Coarse Sand		0.4			
Medium Sand		2.5			
Fine Sand		35.5			
Silt		52.7			
Clay		8.3			

7 61.0

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A0160575

Client Sample ID: **L64E1 SD10-37.4R-0-4**

Lab Sample ID: 200-1593-14

Date Sampled: 09/16/2010 0930

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-C-14.txt

Dilution: 1.0

Initial Weight/Volume: 207.32 g

Date Analyzed: 09/20/2010 2226

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.8			
Sand		30.0			
Coarse Sand		0.8			
Medium Sand		2.7			
Fine Sand		26.5			
Silt		60.5			
Clay		8.7			

7 69.2

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A01160575

Client Sample ID: ~~L64E2~~ SD10-37.5R-0-6

Lab Sample ID: 200-1593-15

Date Sampled: 09/16/2010 1010

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-C-15.txt

Dilution: 1.0

Initial Weight/Volume: 173.46 g

Date Analyzed: 09/20/2010 2229

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.1			
Sand		15.7			
Coarse Sand		0.2			
Medium Sand		0.7			
Fine Sand		14.8			
Silt		71.5			
Clay		12.7			

7 84.2



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1593-1

Sdg Number: A0160575

Client Sample ID: L64E4

~~SD10-DUP4~~ SD10-37.6-0-3

Lab Sample ID: 200-1593-16

Date Sampled: 09/16/2010 1100

Client Matrix: Solid

Date Received: 09/18/2010 0945

D422 Grain Size

Method: D422

Analysis Batch: 200-6898

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1593-C-16.txt

Dilution: 1.0

Initial Weight/Volume: 207.81 g

Date Analyzed: 09/20/2010 2233

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.2			
Sand		46.5			
Coarse Sand		0.7			
Medium Sand		3.4			
Fine Sand		42.4			
Silt		48.8			
Clay		4.5			

7 53.3

Rueters Organics Corporation

Client Sample ID: SD10-36.1C-0-3

General Chemistry

Lot-Sample #....: A0J120402-001 Work Order #....: L798X Matrix.....: SO
Date Sampled....: 09/15/10 11:35 Date Received...: 09/16/10
% Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	72.5	10.0	%	MCAWW 160.3 MOD	10/15-10/18/10	0288148
Dilution Factor: 1						
Total Organic Carbon	3200	1400	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286421
Dilution Factor: 1						

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: SD10-37.6C-0-2

General Chemistry

Lot-Sample #...: A0J120402-002 Work Order #...: L7980 Matrix.....: SO
Date Sampled...: 09/16/10 10:50 Date Received...: 09/16/10
% Moisture.....: 29

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	71.1	10.0	%	MCAWW 160.3 MOD	10/15-10/18/10	0288148
				Dilution Factor: 1		
Total Organic Carbon	1600	1400	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286421
				Dilution Factor: 1		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-002-01

GC Semivolatiles

Lot-Sample #...: A0I220591-001 Work Order #...: L7CJA1AE Matrix.....: SO
 Date Sampled...: 09/20/10 11:20 Date Received...: 09/22/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/02/10
 Prep Batch #...: 0273035
 Dilution Factor: 10 Initial Wgt/Vol: 30.04 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 27 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	560	45	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96 DIL	(31 - 131)
Decachlorobiphenyl	106 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rutgers Organics Corporation

Client Sample ID: FPS10-003

GC Semivolatiles

Lot-Sample #...: A0I220591-004 Work Order #...: L7CJJ1AE Matrix.....: SO
 Date Sampled...: 09/20/10 13:55 Date Received...: 09/22/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/02/10
 Prep Batch #...: 0273035
 Dilution Factor: 10 Initial Wgt/Vol: 30.07 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 26 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	450	45	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93 DIL	(31 - 131)
Decachlorobiphenyl	78 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-001

GC Semivolatiles

Lot-Sample #...: A0I220591-007 Work Order #...: L7CJN1AE Matrix.....: SO
Date Sampled...: 09/20/10 16:05 Date Received...: 09/22/10
Prep Date.....: 09/30/10 Analysis Date...: 10/04/10
Prep Batch #...: 0273035
Dilution Factor: 1 Initial Wgt/Vol: 30.01 g Final Wgt/Vol...: 10 mL
% Moisture.....: 43 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	14	5.8	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	70	(31 - 131)
Decachlorobiphenyl	65	(18 - 145)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-DUP-H-01

GC Semivolatiles

Lot-Sample #....: A0I220591-008 Work Order #....: L7CJQ1AD Matrix.....: SO
 Date Sampled....: 09/20/10 16:05 Date Received...: 09/22/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/04/10
 Prep Batch #....: 0273035
 Dilution Factor: 1 Initial Wgt/Vol: 30.1 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 45 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	8.6	6.0	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	60	(31 - 131)
Decachlorobiphenyl	53	(18 - 145)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-004

GC Semivolatiles

Lot-Sample #...: A0I220591-012 Work Order #...: L7CKD1AE Matrix.....: SO
 Date Sampled...: 09/21/10 09:50 Date Received...: 09/22/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/02/10
 Prep Batch #...: 0273035
 Dilution Factor: 10 Initial Wgt/Vol: 30.04 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 42 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	510	57	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81 DIL	(31 - 131)
Decachlorobiphenyl	44 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-005

GC Semivolatiles

Lot-Sample #....: A0I220591-015 Work Order #....: L7CKM1AE Matrix.....: SO
 Date Sampled....: 09/21/10 11:20 Date Received...: 09/22/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/02/10
 Prep Batch #....: 0273035
 Dilution Factor: 10 Initial Wgt/Vol: 30.06 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 54 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	170	72	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83 DIL	(31 - 131)
Decachlorobiphenyl	75 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-006

GC Semivolatiles

Lot-Sample #....: A0I220591-018 Work Order #....: L7CK11AE Matrix.....: SO
 Date Sampled....: 09/21/10 13:10 Date Received...: 09/22/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/02/10
 Prep Batch #....: 0273035
 Dilution Factor: 10 Initial Wgt/Vol: 30.08 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 25 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	300	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87 DIL	(31 - 131)
Decachlorobiphenyl	88 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-007

GC Semivolatiles

Lot-Sample #...: A0I220591-021 Work Order #...: L7CK91AJ Matrix.....: SO
 Date Sampled...: 09/21/10 14:50 Date Received...: 09/22/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/02/10
 Prep Batch #...: 0273035
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 17 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	600	40	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93 DIL	(31 - 131)
Decachlorobiphenyl	77 DIL	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: FPS10-008-01

GC Semivolatiles

Lot-Sample #....: A0I220591-022 Work Order #....: L7CLF1AE Matrix.....: SO
 Date Sampled....: 09/21/10 16:20 Date Received...: 09/22/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/02/10
 Prep Batch #....: 0273035
 Dilution Factor: 10 Initial Wgt/Vol: 30.02 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 22 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	90	43	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89 DIL	(31 - 131)
Decachlorobiphenyl	84 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-008-02

GC Semivolatiles

Lot-Sample #...: A0I220591-023 Work Order #...: L7CLG1AE Matrix.....: SO
 Date Sampled...: 09/21/10 17:25 Date Received...: 09/22/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/04/10
 Prep Batch #...: 0273035
 Dilution Factor: 1 Initial Wgt/Vol: 30.1 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 26 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	9.6 PGJ	4.5	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(31 - 131)
Decachlorobiphenyl	78	(18 - 145)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Ruetgers Organics Corporation

Client Sample ID: FPS10-002-01

General Chemistry

Lot-Sample #...: A0I220591-001 Work Order #...: L7CJA Matrix.....: SO
Date Sampled...: 09/20/10 11:20 Date Received...: 09/22/10
% Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	72.9	10.0	%	MCAWW 160.3 MOD	10/01-10/04/10	0274278
Dilution Factor: 1						
Total Organic Carbon	14000	1400	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
Dilution Factor: 1						

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-003

General Chemistry

Lot-Sample #...: A0I220591-004 Work Order #...: L7CJJ Matrix.....: SO
Date Sampled...: 09/20/10 13:55 Date Received...: 09/22/10
% Moisture.....: 26

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	74.0	10.0	%	MCAWW 160.3 MOD	10/01-10/04/10	0274278
			Dilution Factor: 1			
Total Organic Carbon	16000	1400	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-001

General Chemistry

Lot-Sample #...: A0I220591-007 Work Order #...: L7CJN Matrix.....: SO
Date Sampled...: 09/20/10 16:05 Date Received...: 09/22/10
% Moisture.....: 43

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	57.4	10.0	%	MCAWW 160.3 MOD	10/01-10/04/10	0274278
			Dilution Factor: 1			
Total Organic Carbon	16000 J	1700	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-DUP-H-01

General Chemistry

Lot-Sample #...: A0I220591-008 Work Order #...: L7CJQ Matrix.....: SO
Date Sampled...: 09/20/10 16:05 Date Received...: 09/22/10
% Moisture.....: 45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	55.0	10.0	%	MCAWW 160.3 MOD	10/01-10/04/10	0274278
			Dilution Factor: 1			
Total Organic Carbon	12000 J	1800	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE (S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-004

General Chemistry

Lot-Sample #...: A0I220591-012 Work Order #...: L7CKD Matrix.....: SO
Date Sampled...: 09/21/10 09:50 Date Received...: 09/22/10
% Moisture.....: 42

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	58.1	10.0	%	MCAWW 160.3 MOD	10/01-10/04/10	0274278
			Dilution Factor: 1			
Total Organic Carbon	22000	1700	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-005

General Chemistry

Lot-Sample #...: A0I220591-015 Work Order #...: L7CKM Matrix.....: SO
Date Sampled...: 09/21/10 11:20 Date Received...: 09/22/10
% Moisture.....: 54

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	45.8	10.0	%	MCAWW 160.3 MOD	10/01-10/04/10	0274278
			Dilution Factor: 1			
Total Organic Carbon	13000	2200	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-006

General Chemistry

Lot-Sample #...: A0I220591-018 Work Order #...: L7CK1 Matrix.....: SO
Date Sampled...: 09/21/10 13:10 Date Received...: 09/22/10
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	75.3	10.0	%	MCAWW 160.3 MOD	10/01-10/04/10	0274279
			Dilution Factor: 1			
Total Organic Carbon	13000	1300	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-007

General Chemistry

Lot-Sample #...: A0I220591-021 Work Order #...: L7CK9 Matrix.....: SO
Date Sampled...: 09/21/10 14:50 Date Received...: 09/22/10
% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	83.3	10.0	%	MCAWW 160.3 MOD	10/01-10/04/10	0274279
			Dilution Factor: 1			
Total Organic Carbon	8000	1200	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-008-01

General Chemistry

Lot-Sample #...: A0I220591-022 Work Order #...: L7CLF Matrix.....: SO
Date Sampled...: 09/21/10 16:20 Date Received...: 09/22/10
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	77.6	10.0	%	MCAWW 160.3 MOD	10/01-10/04/10	0274279
			Dilution Factor: 1			
Total Organic Carbon	11000	1300	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-008-02

General Chemistry

Lot-Sample #...: A0I220591-023 Work Order #...: L7CLG Matrix.....: SO
Date Sampled...: 09/21/10 17:25 Date Received...: 09/22/10
% Moisture.....: 26

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	74.2	10.0	%	MCAWW 160.3 MOD	10/01-10/04/10	0274279
			Dilution Factor: 1			
Total Organic Carbon	16000	1300	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1700-1

Sdg Number: A01220591

Client Sample ID: FPS10-002-01

Lab Sample ID: 200-1700-1

Date Sampled: 09/20/2010 1120

Client Matrix: Solid

Date Received: 09/24/2010 1005

D422 Grain Size

Method: D422

Analysis Batch: 200-7281

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1700-B-1.txt

Dilution: 1.0

Initial Weight/Volume: 147.21 g

Date Analyzed: 09/28/2010 1626

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		1.1			
Sand		40.6			
Coarse Sand		1.9			
Medium Sand		5.9			
Fine Sand		32.8			
Silt		46.1			
Clay		12.2			

58.3

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1700-1

Sdg Number: A0I220591

Client Sample ID: FPS10-003

Lab Sample ID: 200-1700-2

Client Matrix: Solid

Date Sampled: 09/20/2010 1355

Date Received: 09/24/2010 1005

D422 Grain Size

Method: D422

Analysis Batch: 200-7281

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1700-B-2.txt

Dilution: 1.0

Initial Weight/Volume:

140.88 g

Date Analyzed: 09/28/2010 1630

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.9			
Sand		51.2			
Coarse Sand		4.7			
Medium Sand		15.1			
Fine Sand		31.4			
Silt		37.8			
Clay		10.1			

47.9

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1700-1

Sdg Number: A01220591

Client Sample ID: FPS10-001

Lab Sample ID: 200-1700-3

Client Matrix: Solid

Date Sampled: 09/20/2010 1605

Date Received: 09/24/2010 1005

D422 Grain Size

Method: D422

Analysis Batch: 200-7281

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1700-B-3.txt

Dilution: 1.0

Initial Weight/Volume: 143.37 g

Date Analyzed: 09/28/2010 1635

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		39.0			
Coarse Sand		0.7			
Medium Sand		7.6			
Fine Sand		30.7			
Silt		51.9			
Clay		9.1	7	61.0	

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1700-1

Sdg Number: A01220591

Client Sample ID: FPS10-004

Lab Sample ID: 200-1700-4

Client Matrix: Solid

Date Sampled: 09/21/2010 0950

Date Received: 09/24/2010 1005

D422 Grain Size

Method: D422

Analysis Batch: 200-7281

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1700-B-4.txt

Dilution: 1.0

Initial Weight/Volume:

122.3 g

Date Analyzed: 09/28/2010 1637

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		42.2			
Coarse Sand		0.5			
Medium Sand		3.0			
Fine Sand		38.7			
Silt		44.0			
Clay		13.8			

57.8

J

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1700-1

Sdg Number: A01220591

Client Sample ID: FPS10-005

Lab Sample ID: 200-1700-5

Client Matrix: Solid

Date Sampled: 09/21/2010 1120

Date Received: 09/24/2010 1005

D422 Grain Size

Method: D422

Analysis Batch: 200-7281

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1700-B-5.txt

Dilution: 1.0

Initial Weight/Volume: 125.68 g

Date Analyzed: 09/28/2010 1639

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		35.3			
Coarse Sand		2.1			
Medium Sand		4.5			
Fine Sand		28.7			
Silt		45.5			
Clay		19.2			

4.7

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1700-1

Sdg Number: A01220591

Client Sample ID: FPS10-006

Lab Sample ID: 200-1700-6

Client Matrix: Solid

Date Sampled: 09/21/2010 1310

Date Received: 09/24/2010 1005

D422 Grain Size

Method: D422

Analysis Batch: 200-7281

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1700-B-6.txt

Dilution: 1.0

Initial Weight/Volume:

161.1 g

Date Analyzed: 09/28/2010 1642

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		6.8			
Sand		52.4			
Coarse Sand		1.2			
Medium Sand		7.3			
Fine Sand		43.9			
Silt		33.1			
Clay		7.7			

40.8



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1700-1

Sdg Number: A01220591

Client Sample ID: FPS10-007

Lab Sample ID: 200-1700-7

Client Matrix: Solid

Date Sampled: 09/21/2010 1450

Date Received: 09/24/2010 1005

D422 Grain Size

Method: D422

Analysis Batch: 200-7281

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1700-D-7.txt

Dilution: 1.0

Initial Weight/Volume:

173.07 g

Date Analyzed: 09/28/2010 1645

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		1.1			
Sand		72.3			
Coarse Sand		2.4			
Medium Sand		10.6			
Fine Sand		59.3			
Silt		20.9			
Clay		5.7			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1700-1

Sdg Number: A01220591

Client Sample ID: FPS10-008-01

Lab Sample ID: 200-1700-8

Date Sampled: 09/21/2010 1620

Client Matrix: Solid

Date Received: 09/24/2010 1005

D422 Grain Size

Method: D422

Analysis Batch: 200-7281

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1700-B-8.txt

Dilution: 1.0

Initial Weight/Volume: 163.78 g

Date Analyzed: 09/28/2010 1650

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.9			
Sand		57.3			
Coarse Sand		0.7			
Medium Sand		9.1			
Fine Sand		47.5			
Silt		34.0			
Clay		7.8			

41.8

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1700-1

Sdg Number: A01220591

Client Sample ID: FPS10-008-02

Lab Sample ID: 200-1700-9

Date Sampled: 09/21/2010 1725

Client Matrix: Solid

Date Received: 09/24/2010 1005

D422 Grain Size

Method: D422

Analysis Batch: 200-7281

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1700-B-9.txt

Dilution: 1.0

Initial Weight/Volume:

159.03 g

Date Analyzed: 09/28/2010 1808

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		3.0			
Sand		40.8			
Coarse Sand		1.6			
Medium Sand		5.8			
Fine Sand		33.4			
Silt		45.9			
Clay		10.3			

56.2



Ruettgers Organics Corporation

Client Sample ID: FPS10-010

GC Semivolatiles

Lot-Sample #....: A0I240563-003 Work Order #....: L7GP51AE Matrix.....: SO
 Date Sampled....: 09/22/10 12:35 Date Received...: 09/24/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/02/10
 Prep Batch #....: 0273035
 Dilution Factor: 10 Initial Wgt/Vol: 30.05 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 23 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	170	43	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92 DIL	(31 - 131)
Decachlorobiphenyl	78 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-011

GC Semivolatiles

Lot-Sample #....: A0I240563-006 Work Order #....: L7GQ31AE Matrix.....: SO
 Date Sampled....: 09/22/10 15:35 Date Received...: 09/24/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/02/10
 Prep Batch #....: 0273035
 Dilution Factor: 10 Initial Wgt/Vol: 30.09 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 27 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	710 J	45	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92 DIL	(31 - 131)
Decachlorobiphenyl	65 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-DUP-H-02

GC Semivolatiles

Lot-Sample #....: A0I240563-007	Work Order #....: L7GQ81AD	Matrix.....: SO
Date Sampled...: 09/22/10 15:35	Date Received...: 09/24/10	
Prep Date.....: 09/30/10	Analysis Date...: 10/02/10	
Prep Batch #....: 0273035		
Dilution Factor: 10	Initial Wgt/Vol: 30.16 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 26	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Mirex	280 J	44	ug/kg
 <u>SURROGATE</u>	 <u>PERCENT</u> <u>RECOVERY</u>	 <u>RECOVERY</u> <u>LIMITS</u>	
Tetrachloro-m-xylene	86 DIL	(31 - 131)	
Decachlorobiphenyl	67 DIL	(18 - 145)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-012

GC Semivolatiles

Lot-Sample #....: A0I240563-010 Work Order #....: L7GRN1AE Matrix.....: SO
 Date Sampled....: 09/23/10 12:20 Date Received...: 09/24/10
 Prep Date.....: 09/30/10 Analysis Date...: 10/02/10
 Prep Batch #....: 0273035
 Dilution Factor: 10 Initial Wgt/Vol: 30.01 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 24 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	1100	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	95 DIL	(31 - 131)
Decachlorobiphenyl	91 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-010

General Chemistry

Lot-Sample #...: A0I240563-003 Work Order #...: L7GP5 Matrix.....: SO
Date Sampled...: 09/22/10 12:35 Date Received...: 09/24/10
% Moisture.....: 23

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	76.7	10.0	%	MCAWW 160.3 MOD	10/04-10/05/10	0277206
Dilution Factor: 1						
Total Organic Carbon	17000	1300	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
Dilution Factor: 1						

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-011

General Chemistry

Lot-Sample #...: AOI240563-006 Work Order #...: L7GQ3 Matrix.....: SO
Date Sampled...: 09/22/10 15:35 Date Received..: 09/24/10
% Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	73.2	10.0	%	MCAWW 160.3 MOD	10/04-10/05/10	0277206
			Dilution Factor: 1			
Total Organic Carbon	17000	1400	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-DUP-H-02

General Chemistry

Lot-Sample #...: A0I240563-007 Work Order #...: L7GQ8 Matrix.....: SO
Date Sampled...: 09/22/10 15:35 Date Received...: 09/24/10
% Moisture.....: 26

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	74.4	10.0	%	MCAWW 160.3 MOD	10/04-10/05/10	0277206
			Dilution Factor: 1			
Total Organic Carbon	13000	1300	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-012

General Chemistry

Lot-Sample #...: A0I240563-010 Work Order #...: L7GRN Matrix.....: SO
Date Sampled...: 09/23/10 12:20 Date Received...: 09/24/10
% Moisture.....: 24

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	75.8	10.0	%	MCAWW 160.3 MOD	10/04-10/05/10	0277206
			Dilution Factor: 1			
Total Organic Carbon	14000	1300	mg/kg	MSA WALKLEY-BLACK	10/06/10	0279303
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

SAMPLE SUMMARY

A01240563

WQ #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L7GP5	003	FPS10-010	09/22/10	12:35
L7GQ3	006	FPS10-011	09/22/10	15:35
L7GQ8	007	FPS10-DUP-H-02	09/22/10	15:35
L7GRN	010	FPS10-012	09/23/10	12:20

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1715-1

Sdg Number: A01240563

Client Sample ID: L7GRN *FPS10 -012*

Lab Sample ID: 200-1715-3

Date Sampled: 09/23/2010 1220

Client Matrix: Solid

Date Received: 09/25/2010 0930

D422 Grain Size

Method: D422

Analysis Batch: 200-7139

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1715-B-3.txt

Dilution: 1.0

Initial Weight/Volume: 107.64 g

Date Analyzed: 09/27/2010 1235

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.1			
Sand		50.7			
Coarse Sand		12.0			
Medium Sand		3.7			
Fine Sand		35.0			
Silt		39.0			
Clay		10.2			

> 49.2

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1715-1

Sdg Number: A0I240563

Client Sample ID: ~~L7GP5~~ FPS10-010

Lab Sample ID: 200-1715-1

Date Sampled: 09/22/2010 1235

Client Matrix: Solid

Date Received: 09/25/2010 0930

D422 Grain Size

Method: D422

Analysis Batch: 200-7139

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1715-B-1.txt

Dilution: 1.0

Initial Weight/Volume: 117.78 g

Date Analyzed: 09/27/2010 1150

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		67.2			
Coarse Sand		12.4			
Medium Sand		10.0			
Fine Sand		44.8			
Silt		28.1			
Clay		4.7			

732.8

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1715-1

Sdg Number: A01240563

Client Sample ID: ~~L7993~~ *FPS10-011*

Lab Sample ID: 200-1715-2

Date Sampled: 09/22/2010 1535

Client Matrix: Solid

Date Received: 09/25/2010 0930

D422 Grain Size

Method: D422

Analysis Batch: 200-7139

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1715-B-2.txt

Dilution: 1.0

Initial Weight/Volume:

100.72 g

Date Analyzed: 09/27/2010 1230

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		<u>0.4</u>			
Sand		<u>61.3</u>			
Coarse Sand		13.2			
Medium Sand		5.5			
Fine Sand		42.6			
Silt		31.6			
Clay		6.7			

> 38.3

Ruetgers Organics Corporation

Client Sample ID: FPS10-DUP4

GC Semivolatiles

Lot-Sample #....: A0I300420-002 Work Order #....: L7PNX1AD Matrix.....: SO
 Date Sampled....: 09/28/10 09:12 Date Received...: 09/30/10
 Prep Date.....: 10/09/10 Analysis Date...: 10/12/10
 Prep Batch #....: 0282010
 Dilution Factor: 10 Initial Wgt/Vol: 30.1 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 27 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	1100 J	45	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Tetrachloro-m-xylene	3560 DIL, *	(31 - 131)	
Decachlorobiphenyl	114 DIL	(18 - 145)	

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-013

GC Semivolatiles

Lot-Sample #....: A0I300420-004 Work Order #....: L7PN31AE Matrix.....: SO
 Date Sampled....: 09/28/10 09:55 Date Received...: 09/30/10
 Prep Date.....: 10/09/10 Analysis Date...: 10/12/10
 Prep Batch #....: 0282010
 Dilution Factor: 10 Initial Wgt/Vol: 30.04 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 37 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	690 J	53	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Tetrachloro-m-xylene	1890 DIL, *	(31 - 131)	
Decachlorobiphenyl	66 DIL	(18 - 145)	

NOTE(S) :

DIL. The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-014

GC Semivolatiles

Lot-Sample #....: A0I300420-007 Work Order #....: L7PPM1AE Matrix.....: SO
 Date Sampled....: 09/28/10 11:15 Date Received...: 09/30/10
 Prep Date.....: 10/09/10 Analysis Date...: 10/12/10
 Prep Batch #....: 0282010
 Dilution Factor: 10 Initial Wgt/Vol: 30.01 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 32 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	750	49	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	72 DIL	(31 - 131)
Decachlorobiphenyl	101 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: FPS10-015

GC Semivolatiles

Lot-Sample #...: A0I300420-010 Work Order #...: L7PPV1AE Matrix.....: SO
 Date Sampled...: 09/28/10 12:45 Date Received...: 09/30/10
 Prep Date.....: 10/09/10 Analysis Date...: 10/12/10
 Prep Batch #...: 0282010
 Dilution Factor: 10 Initial Wgt/Vol: 30.02 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 42 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	450 J	57	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	2290 DIL, *	(31 - 131)
Decachlorobiphenyl	94 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: FPS10-016

GC Semivolatiles

Lot-Sample #....: A0I300420-013 Work Order #....: L7PP31AE Matrix.....: SO
 Date Sampled....: 09/28/10 14:55 Date Received...: 09/30/10
 Prep Date.....: 10/09/10 Analysis Date...: 10/12/10
 Prep Batch #....: 0282010
 Dilution Factor: 10 Initial Wgt/Vol: 30.09 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 35 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	880 J	50	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Tetrachloro-m-xylene	1470 DIL, *	(31 - 131)	
Decachlorobiphenyl	105 DIL	(18 - 145)	

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-017

GC Semivolatiles

Lot-Sample #...: A0I300420-016 Work Order #...: L7PQA1AE Matrix.....: SO
 Date Sampled...: 09/28/10 16:05 Date Received...: 09/30/10
 Prep Date.....: 10/09/10 Analysis Date...: 10/12/10
 Prep Batch #...: 0282010
 Dilution Factor: 10 Initial Wgt/Vol: 30.08 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 30 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	950 J	47	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	925 DIL, *	(31 - 131)
Decachlorobiphenyl	122 DIL	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-018

GC Semivolatiles

Lot-Sample #....: A0I300420-019 Work Order #....: L7PQL1AE Matrix.....: SO
 Date Sampled....: 09/29/10 10:35 Date Received...: 09/30/10
 Prep Date.....: 10/09/10 Analysis Date...: 10/12/10
 Prep Batch #....: 0282010
 Dilution Factor: 10 Initial Wgt/Vol: 30.01 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 22 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	170	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	126 DIL	(31 - 131)
Decachlorobiphenyl	136 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-DUP5

GC Semivolatiles

Lot-Sample #....: A0I300420-020 Work Order #....: L7PQM1AD Matrix.....: SO
 Date Sampled....: 09/29/10 10:35 Date Received...: 09/30/10
 Prep Date.....: 10/09/10 Analysis Date...: 10/12/10
 Prep Batch #....: 0282010
 Dilution Factor: 10 Initial Wgt/Vol: 30.02 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 22 Method.....: SW846 8081B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	230 J	43	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Tetrachloro-m-xylene	167 DIL, *	(31 - 131)	
Decachlorobiphenyl	101 DIL	(18 - 145)	

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-019

GC Semivolatiles

Lot-Sample #...: A0I300420-023	Work Order #...: L7PQ11AJ	Matrix.....: SO
Date Sampled...: 09/29/10 12:20	Date Received...: 09/30/10	
Prep Date.....: 10/09/10	Analysis Date...: 10/12/10	
Prep Batch #...: 0282010		
Dilution Factor: 10	Initial Wgt/Vol: 30.09 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 21	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Mirex	680	42	ug/kg
 <u>SURROGATE</u>	 <u>PERCENT</u> <u>RECOVERY</u>	 <u>RECOVERY</u> <u>LIMITS</u>	
Tetrachloro-m-xylene	107 DIL	(31 - 131)	
Decachlorobiphenyl	81 DIL	(18 - 145)	

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-020

GC Semivolatiles

Lot-Sample #....: A0I300420-026 Work Order #....: L7PRK1AE Matrix.....: SO
 Date Sampled....: 09/29/10 13:45 Date Received...: 09/30/10
 Prep Date.....: 10/09/10 Analysis Date...: 10/12/10
 Prep Batch #....: 0282010
 Dilution Factor: 10 Initial Wgt/Vol: 30.07 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 25 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	1300	44	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Tetrachloro-m-xylene	52 DIL	(31 - 131)	
Decachlorobiphenyl	124 DIL	(18 - 145)	

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: FPS10-021

GC Semivolatiles

Lot-Sample #....: A0I300420-029	Work Order #....: L7PRR1AE	Matrix.....: SO
Date Sampled....: 09/29/10 15:00	Date Received...: 09/30/10	
Prep Date.....: 10/09/10	Analysis Date...: 10/12/10	
Prep Batch #....: 0282010		
Dilution Factor: 10	Initial Wgt/Vol: 30.2 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 25	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Mirex	880	44	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Tetrachloro-m-xylene	115 DIL	(31 - 131)
Decachlorobiphenyl	109 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-022

GC Semivolatiles

Lot-Sample #....: A0I300420-032 Work Order #....: L7PRW1AE Matrix.....: SO
 Date Sampled....: 09/29/10 17:25 Date Received...: 09/30/10
 Prep Date.....: 10/09/10 Analysis Date...: 10/12/10
 Prep Batch #....: 0282010
 Dilution Factor: 10 Initial Wgt/Vol: 30.01 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 19 Method.....: SW846 8081B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	1300	41	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	115 DIL	(31 - 131)
Decachlorobiphenyl	83 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-DUP4

General Chemistry

Lot-Sample #...: A0I300420-002 Work Order #...: L7PNX Matrix.....: SO
Date Sampled...: 09/28/10 09:12 Date Received...: 09/30/10
% Moisture.....: 27

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	72.7	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
Dilution Factor: 1						
Total Organic Carbon	8700	1400	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
Dilution Factor: 1						

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-013

General Chemistry

Lot-Sample #...: A0I300420-004 Work Order #...: L7PN3 Matrix.....: SO
Date Sampled...: 09/28/10 09:55 Date Received...: 09/30/10
% Moisture.....: 37

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	62.6	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
			Dilution Factor: 1			
Total Organic Carbon	8100	1600	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-014

General Chemistry

Lot-Sample #...: A0I300420-007 Work Order #...: L7PPM Matrix.....: SO
Date Sampled...: 09/28/10 11:15 Date Received...: 09/30/10
% Moisture.....: 32

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	67.9	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
				Dilution Factor: 1		
Total Organic Carbon	2800	1500	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
				Dilution Factor: 1		

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-015

General Chemistry

Lot-Sample #...: A0I300420-010 Work Order #...: L7PPV Matrix.....: SO
Date Sampled...: 09/28/10 12:45 Date Received...: 09/30/10
% Moisture.....: 42

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	58.1	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
			Dilution Factor: 1			
Total Organic Carbon	4600	1700	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-016

General Chemistry

Lot-Sample #...: A0I300420-013 Work Order #...: L7PP3 Matrix.....: SO
Date Sampled...: 09/28/10 14:55 Date Received...: 09/30/10
% Moisture.....: 35

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	65.4	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
			Dilution Factor: 1			
Total Organic Carbon	4800	1500	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-017

General Chemistry

Lot-Sample #....: A0I300420-016 Work Order #....: L7PQA Matrix.....: SO
Date Sampled...: 09/28/10 16:05 Date Received...: 09/30/10
% Moisture.....: 30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	69.9	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
			Dilution Factor: 1			
Total Organic Carbon	4300	1400	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-018

General Chemistry

Lot-Sample #...: A0I300420-019 Work Order #...: L7PQL Matrix.....: SO
Date Sampled...: 09/29/10 10:35 Date Received...: 09/30/10
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	78.2	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
			Dilution Factor: 1			
Total Organic Carbon	3500	1300	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-DUP5

General Chemistry

Lot-Sample #...: A0I300420-020 Work Order #...: L7PQM Matrix.....: SO
Date Sampled...: 09/29/10 10:35 Date Received...: 09/30/10
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	77.6	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
			Dilution Factor: 1			
Total Organic Carbon	4700	1300	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-019

General Chemistry

Lot-Sample #...: A0I300420-023 Work Order #...: L7PQ1 Matrix.....: SO
Date Sampled...: 09/29/10 12:20 Date Received...: 09/30/10
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	79.1	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
			Dilution Factor: 1			
Total Organic Carbon	5000	1300	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-020

General Chemistry

Lot-Sample #...: A0I300420-026 Work Order #...: L7PRK Matrix.....: SO
Date Sampled...: 09/29/10 13:45 Date Received...: 09/30/10
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	75.4	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
			Dilution Factor: 1			
Total Organic Carbon	4600	1300	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-021

General Chemistry

Lot-Sample #...: A0I300420-029 Work Order #...: L7PRR Matrix.....: SO
Date Sampled...: 09/29/10 15:00 Date Received...: 09/30/10
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	74.6	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
			Dilution Factor: 1			
Total Organic Carbon	4900	1300	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-022

General Chemistry

Lot-Sample #...: A0I300420-032 Work Order #...: L7PRW Matrix.....: SO
Date Sampled...: 09/29/10 17:25 Date Received...: 09/30/10
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	81.2	10.0	%	MCAWW 160.3 MOD	10/07-10/08/10	0280165
				Dilution Factor: 1		
Total Organic Carbon	3900	1200	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
				Dilution Factor: 1		

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1790-1

Sdg Number: A01300420

Client Sample ID: FPS10-013

Lab Sample ID: 200-1790-1

Client Matrix: Solid

Date Sampled: 09/28/2010 0955

Date Received: 10/01/2010 1030

D422 Grain Size

Method: D422

Analysis Batch: 200-7433

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1790-B-1.txt

Dilution: 1.0

Initial Weight/Volume:

136.25 g

Date Analyzed: 10/01/2010 2020

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Fine Sand		24.7			
Gravel		0.5			
Coarse Sand		0.4			
Medium Sand		2.1			
Sand		27.2			
Fines		72.3			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1790-1

Sdg Number: A01300420

Client Sample ID: FPS10-014

Lab Sample ID: 200-1790-2

Date Sampled: 09/28/2010 1115

Client Matrix: Solid

Date Received: 10/01/2010 1030

D422 Grain Size

Method: D422

Analysis Batch: 200-7433

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1790-B-2.txt

Dilution: 1.0

Initial Weight/Volume: 146.48 g

Date Analyzed: 10/01/2010 2023

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Fine Sand		30.4			
Gravel		0.4			
Coarse Sand		0.1			
Medium Sand		2.6			
Sand		33.1			
Fines		66.5			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1790-1

Sdg Number: A01300420

Client Sample ID: FPS10-016

Lab Sample ID: 200-1790-3

Date Sampled: 09/28/2010 1455

Client Matrix: Solid

Date Received: 10/01/2010 1030

D422 Grain Size

Method: D422

Analysis Batch: 200-7433

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1790-B-3.txt

Dilution: 1.0

Initial Weight/Volume:

149.26 g

Date Analyzed: 10/01/2010 2026

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Fine Sand		27.6			
Gravel		0.0			
Coarse Sand		0.1			
Medium Sand		1.3			
Sand		29.0			
Fines		71.0			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1790-1

Sdg Number: A01300420

Client Sample ID: FPS10-017

Lab Sample ID: 200-1790-4

Client Matrix: Solid

Date Sampled: 09/28/2010 1605

Date Received: 10/01/2010 1030

D422 Grain Size

Method: D422

Analysis Batch: 200-7433

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1790-B-4.txt

Dilution: 1.0

Initial Weight/Volume: 136.84 g

Date Analyzed: 10/01/2010 2029

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Fine Sand		38.2			
Gravel		0.0			
Coarse Sand		0.2			
Medium Sand		3.4			
Sand		41.8			
Fines		58.2			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1790-1

Sdg Number: A01300420

Client Sample ID: FPS10-018

Lab Sample ID: 200-1790-5

Client Matrix: Solid

Date Sampled: 09/29/2010 1035

Date Received: 10/01/2010 1030

D422 Grain Size

Method: D422

Analysis Batch: 200-7433

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1790-B-5.txt

Dilution: 1.0

Initial Weight/Volume:

151.52 g

Date Analyzed: 10/01/2010 2032

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Fine Sand		44.7			
Gravel		0.8			
Coarse Sand		0.7			
Medium Sand		7.8			
Sand		53.2			
Fines		46.0			

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Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1790-1

Sdg Number: A01300420

Client Sample ID: FPS10-019

Lab Sample ID: 200-1790-6

Date Sampled: 09/29/2010 1220

Client Matrix: Solid

Date Received: 10/01/2010 1030

D422 Grain Size

Method: D422

Analysis Batch: 200-7433

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1790-D-6.txt

Dilution: 1.0

Initial Weight/Volume: 152.03 g

Date Analyzed: 10/01/2010 2035

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Fine Sand		33.0			
Gravel		6.7			
Coarse Sand		6.4			
Medium Sand		9.7			
Sand		49.1			
Fines		44.2			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1790-1

Sdg Number: A0I300420

Client Sample ID: FPS10-020

Lab Sample ID: 200-1790-7

Date Sampled: 09/29/2010 1345

Client Matrix: Solid

Date Received: 10/01/2010 1030

D422 Grain Size

Method: D422
Preparation: N/A
Dilution: 1.0
Date Analyzed: 10/01/2010 2050
Date Prepared:

Analysis Batch: 200-7433

Instrument ID: D422_import
Lab File ID: 200-1790-B-7.txt
Initial Weight/Volume: 162.61 g
Final Weight/Volume:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Fine Sand		34.1			
Gravel		0.0			
Coarse Sand		0.1			
Medium Sand		1.9			
Sand		36.1			
Fines		63.9			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1790-1

Sdg Number: A01300420

Client Sample ID: FPS10-021

Lab Sample ID: 200-1790-8

Date Sampled: 09/29/2010 1500

Client Matrix: Solid

Date Received: 10/01/2010 1030

D422 Grain Size

Method: D422

Analysis Batch: 200-7433

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1790-B-8.txt

Dilution: 1.0

Initial Weight/Volume: 163.03 g

Date Analyzed: 10/01/2010 2052

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Fine Sand		31.7			
Gravel		0.0			
Coarse Sand		0.1			
Medium Sand		1.1			
Sand		32.9			
Fines		67.1			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1790-1

Sdg Number: A01300420

Client Sample ID: FPS10-022

Lab Sample ID: 200-1790-9

Client Matrix: Solid

Date Sampled: 09/29/2010 1725

Date Received: 10/01/2010 1030

D422 Grain Size

Method: D422

Analysis Batch: 200-7433

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1790-B-9.txt

Dilution: 1.0

Initial Weight/Volume: 182.84 g

Date Analyzed: 10/01/2010 2055

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Fine Sand		36.2			
Gravel		3.2			
Coarse Sand		2.0			
Medium Sand		8.9			
Sand		47.1			
Fines		49.7			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1790-1

Sdg Number: A01300420

Client Sample ID: FPS10-015

Lab Sample ID: 200-1806-1

Date Sampled: 09/28/2010 1245

Client Matrix: Solid

Date Received: 10/02/2010 1100

D422 Grain Size

Method: D422

Analysis Batch: 200-7431

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1806-B-1.txt

Dilution: 1.0

Initial Weight/Volume: 98.18 g

Date Analyzed: 10/04/2010 1011

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Fine Sand		28.7			
Gravel		0.0			
Coarse Sand		0.4			
Medium Sand		1.7			
Sand		30.8			
Fines		69.2			

Ruettgers Organics Corporation

Client Sample ID: FPS10-023

GC Semivolatiles

Lot-Sample #....: A0J040425-004	Work Order #....: L7XGD1AE	Matrix.....: SO
Date Sampled....: 09/30/10 09:55	Date Received...: 10/02/10	
Prep Date.....: 10/06/10	Analysis Date...: 10/08/10	
Prep Batch #....: 0279070		
Dilution Factor: 10	Initial Wgt/Vol: 30.12 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 41	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Mirex	130	56	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Tetrachloro-m-xylene	101 DIL	(31 - 131)
Decachlorobiphenyl	112 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: FPS10-024

GC Semivolatiles

Lot-Sample #....: A0J040425-007	Work Order #....: L7XHH1AE	Matrix.....: SO
Date Sampled....: 09/30/10 11:05	Date Received...: 10/02/10	
Prep Date.....: 10/06/10	Analysis Date...: 10/08/10	
Prep Batch #....: 0279070		
Dilution Factor: 10	Initial Wgt/Vol: 30.05 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 32	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Mirex	180	48	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Tetrachloro-m-xylene	134 DIL, *	(31 - 131)
Decachlorobiphenyl	101 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-027

GC Semivolatiles

Lot-Sample #....: A0J040425-016 Work Order #....: L7XH41AE Matrix.....: SO
 Date Sampled....: 09/30/10 14:55 Date Received...: 10/02/10
 Prep Date.....: 10/06/10 Analysis Date...: 10/08/10
 Prep Batch #....: 0279070
 Dilution Factor: 10 Initial Wgt/Vol: 30.01 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 43 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	100	58	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88 DIL	(31 - 131)
Decachlorobiphenyl	101 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: FPS10-028

GC Semivolatiles

Lot-Sample #...: A0J040425-019 Work Order #...: L7XH91AE Matrix.....: SO
Date Sampled...: 09/30/10 16:30 Date Received...: 10/02/10
Prep Date.....: 10/06/10 Analysis Date...: 10/11/10
Prep Batch #...: 0279070
Dilution Factor: 1 Initial Wgt/Vol: 30.15 g Final Wgt/Vol...: 10 mL
% Moisture.....: 46 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	10	6.1	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(31 - 131)
Decachlorobiphenyl	74	(18 - 145)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-029

GC Semivolatiles

Lot-Sample #...: A0J040425-022 Work Order #...: L7XJE1AE Matrix.....: SO
 Date Sampled...: 10/01/10 10:20 Date Received...: 10/02/10
 Prep Date.....: 10/06/10 Analysis Date...: 10/08/10
 Prep Batch #...: 0279070
 Dilution Factor: 10 Initial Wgt/Vol: 30.09 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 19 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	730	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	108 DIL	(31 - 131)
Decachlorobiphenyl	108 DIL	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-030

GC Semivolatiles

Lot-Sample #....: A0J040425-025 Work Order #....: L7XJH1AE Matrix.....: SO
 Date Sampled....: 10/01/10 11:45 Date Received...: 10/02/10
 Prep Date.....: 10/06/10 Analysis Date...: 10/08/10
 Prep Batch #....: 0279070
 Dilution Factor: 10 Initial Wgt/Vol: 30.08 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 27 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	300 J	45	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	66 DIL	(31 - 131)
Decachlorobiphenyl	106 DIL	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-DUP7

GC Semivolatiles

Lot-Sample #....: A0J040425-026 Work Order #....: L7XJJ1AD Matrix.....: SO
 Date Sampled....: 10/01/10 11:45 Date Received...: 10/02/10
 Prep Date.....: 10/06/10 Analysis Date...: 10/08/10
 Prep Batch #....: 0279070
 Dilution Factor: 10 Initial Wgt/Vol: 30.08 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 25 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	830 J	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	69 DIL	(31 - 131)
Decachlorobiphenyl	112 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-031

GC Semivolatiles

Lot-Sample #....: A0J040425-029 Work Order #....: L7XJ21AE Matrix.....: SO
 Date Sampled....: 10/01/10 13:05 Date Received...: 10/02/10
 Prep Date.....: 10/06/10 Analysis Date...: 10/08/10
 Prep Batch #....: 0279070
 Dilution Factor: 10 Initial Wgt/Vol: 30.1 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 24 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	420 J	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	365 DIL, *	(31 - 131)
Decachlorobiphenyl	70 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-032

GC Semivolatiles

Lot-Sample #....: A0J040425-032 Work Order #....: L7XKK1AJ Matrix.....: SO
 Date Sampled....: 10/01/10 14:05 Date Received...: 10/02/10
 Prep Date.....: 10/06/10 Analysis Date...: 10/08/10
 Prep Batch #....: 0279070
 Dilution Factor: 10 Initial Wgt/Vol: 30.11 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 21 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	740	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93 DIL	(31 - 131)
Decachlorobiphenyl	92 DIL	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-033

GC Semivolatiles

Lot-Sample #...: A0J040425-035 Work Order #...: L7XKT1AE Matrix.....: SO
 Date Sampled...: 10/01/10 15:50 Date Received...: 10/02/10
 Prep Date.....: 10/06/10 Analysis Date...: 10/08/10
 Prep Batch #...: 0279070
 Dilution Factor: 10 Initial Wgt/Vol: 30.03 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 27 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	590	45	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	97 DIL	(31 - 131)
Decachlorobiphenyl	76 DIL	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-034

GC Semivolatiles

Lot-Sample #....: A0J040425-038 Work Order #....: L7XK51AE Matrix.....: SO
 Date Sampled....: 10/01/10 17:10 Date Received...: 10/02/10
 Prep Date.....: 10/06/10 Analysis Date...: 10/08/10
 Prep Batch #....: 0279070
 Dilution Factor: 10 Initial Wgt/Vol: 30.02 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 22 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	1100	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	99 DIL	(31 - 131)
Decachlorobiphenyl	75 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-023

General Chemistry

Lot-Sample #....: A0J040425-004 Work Order #....: L7XGD Matrix.....: SO
Date Sampled....: 09/30/10 09:55 Date Received...: 10/02/10
% Moisture.....: 41

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	58.8	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
Dilution Factor: 1						
Total Organic Carbon	25000	3400	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
Dilution Factor: 2						

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-024

General Chemistry

Lot-Sample #...: A0J040425-007 Work Order #...: L7XHH Matrix.....: SO
Date Sampled...: 09/30/10 11:05 Date Received...: 10/02/10
% Moisture.....: 32

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	68.4	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
			Dilution Factor: 1			
Total Organic Carbon	28000	2900	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
			Dilution Factor: 2			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Client Sample ID: FPS10-027

Lot-Sample #....: A0J040425-016 Work Order #....: L7XH4 Matrix.....: SO
Date Sampled....: 09/30/10 14:55 Date Received...: 10/02/10
% Moisture.....: 43

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	56.8	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
	Dilution Factor: 1					
Total Organic Carbon	29000	3500	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
	Dilution Factor: 2					

NOTE (S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-028

General Chemistry

Lot-Sample #...: A0J040425-019 Work Order #...: L7XH9 Matrix.....: SO
Date Sampled...: 09/30/10 16:30 Date Received...: 10/02/10
% Moisture.....: 46

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	53.7	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
			Dilution Factor: 1			
Total Organic Carbon	5600	3700	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
			Dilution Factor: 2			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-029

General Chemistry

Lot-Sample #...: A0J040425-022 Work Order #...: L7XJE Matrix.....: SO
Date Sampled...: 10/01/10 10:20 Date Received...: 10/02/10
% Moisture.....: 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	80.7	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
			Dilution Factor: 1			
Total Organic Carbon	22000	2500	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
			Dilution Factor: 2			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-030

General Chemistry

Lot-Sample #...: A0J040425-025 Work Order #...: L7XJH Matrix.....: SO
Date Sampled...: 10/01/10 11:45 Date Received...: 10/02/10
% Moisture.....: 27

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	73.5	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
			Dilution Factor: 1			
Total Organic Carbon	18000	2700	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
			Dilution Factor: 2			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Client Sample ID: FPS10-DUP7

Lot-Sample #.... A0J040425-026 Work Order #.... L7XJJ Matrix..... SO
Date Sampled.... 10/01/10 11:45 Date Received... 10/02/10
% Moisture..... 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	75.0	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
		Dilution Factor: 1				
Total Organic Carbon	21000	2700	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
		Dilution Factor: 2				

NOTE (S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-031

General Chemistry

Lot-Sample #...: A0J040425-029 Work Order #...: L7XJ2 Matrix.....: SO
Date Sampled...: 10/01/10 13:05 Date Received...: 10/02/10
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	75.5	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
			Dilution Factor: 1			
Total Organic Carbon	27000	2600	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
			Dilution Factor: 2			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-032

General Chemistry

Lot-Sample #...: A0J040425-032 Work Order #...: L7XKK Matrix.....: SO
Date Sampled...: 10/01/10 14:05 Date Received...: 10/02/10
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	79.1	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
Dilution Factor: 1						
Total Organic Carbon	20000	2500	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
Dilution Factor: 2						

NOTE(S) :

RL: Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-033

General Chemistry

Lot-Sample #...: A0J040425-035 Work Order #...: L7XKT Matrix.....: SO
Date Sampled...: 10/01/10 15:50 Date Received...: 10/02/10
% Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	72.7	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
			Dilution Factor: 1			
Total Organic Carbon	30000	2700	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
			Dilution Factor: 2			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-034

General Chemistry

Lot-Sample #...: A0J040425-038 Work Order #...: L7XK5 Matrix.....: SO
Date Sampled...: 10/01/10 17:10 Date Received...: 10/02/10
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	77.7	10.0	%	MCAWW 160.3 MOD	10/06-10/07/10	0279279
			Dilution Factor: 1			
Total Organic Carbon	26000	2600	mg/kg	MSA WALKLEY-BLACK	10/08/10	0281055
			Dilution Factor: 2			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1816-1

Sdg Number: A0J040425

Client Sample ID: FPS10-023

Lab Sample ID: 200-1816-1

Client Matrix: Solid

Date Sampled: 09/30/2010 0955

Date Received: 10/05/2010 1020

D422 Grain Size

Method: D422

Analysis Batch: 200-7549

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1816-B-1.txt

Dilution: 1.0

Initial Weight/Volume: 109.54 g

Date Analyzed: 10/05/2010 1409

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.8			
Sand		39.9			
Coarse Sand		0.2			
Medium Sand		2.9			
Fine Sand		36.8			
Silt		50.4			
Clay		8.9			

59.3

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1816-1

Sdg Number: A0J040425

Client Sample ID: FPS10-024

Lab Sample ID: 200-1816-2

Client Matrix: Solid

Date Sampled: 09/30/2010 1105

Date Received: 10/05/2010 1020

D422 Grain Size

Method: D422

Analysis Batch: 200-7549

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1816-B-2.txt

Dilution: 1.0

Initial Weight/Volume: 109.24 g

Date Analyzed: 10/05/2010 1413

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		31.6			
Coarse Sand		0.2			
Medium Sand		2.2			
Fine Sand		29.2			
Silt		54.0			
Clay		14.4			

68.4



Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1816-1

Sdg Number: A0J040425

Client Sample ID: FPS10-027

Lab Sample ID: 200-1816-3

Client Matrix: Solid

Date Sampled: 09/30/2010 1455

Date Received: 10/05/2010 1020

D422 Grain Size

Method: D422

Analysis Batch: 200-7549

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1816-B-3.txt

Dilution: 1.0

Initial Weight/Volume: 105.14 g

Date Analyzed: 10/05/2010 1416

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		24.9			
Coarse Sand		0.1			
Medium Sand		1.5			
Fine Sand		23.3			
Silt		61.4			
Clay		13.7			

75.1

J

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1816-1

Sdg Number: A0J040425

Client Sample ID: FPS10-028

Lab Sample ID: 200-1816-4

Client Matrix: Solid

Date Sampled: 09/30/2010 1630

Date Received: 10/05/2010 1020

D422 Grain Size

Method: D422

Analysis Batch: 200-7549

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1816-B-4.txt

Dilution: 1.0

Initial Weight/Volume: 103.84 g

Date Analyzed: 10/05/2010 1419

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		26.7			
Coarse Sand		0.1			
Medium Sand		1.9			
Fine Sand		24.7			
Silt		62.7			
Clay		10.6			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1816-1

Sdg Number: A0J040425

Client Sample ID: FPS10-029

Lab Sample ID: 200-1816-5

Client Matrix: Solid

Date Sampled: 10/01/2010 1020

Date Received: 10/05/2010 1020

D422 Grain Size

Method: D422

Analysis Batch: 200-7549

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1816-B-5.txt

Dilution: 1.0

Initial Weight/Volume: 104.18 g

Date Analyzed: 10/05/2010 1422

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.9			
Sand		23.3			
Coarse Sand		0.1			
Medium Sand		1.3			
Fine Sand		21.9			
Silt		66.0			
Clay		9.8			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1816-1

Sdg Number: A0J040425

Client Sample ID: FPS10-030

Lab Sample ID: 200-1816-6

Client Matrix: Solid

Date Sampled: 10/01/2010 1145

Date Received: 10/05/2010 1020

D422 Grain Size

Method: D422

Analysis Batch: 200-7549

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1816-B-6.txt

Dilution: 1.0

Initial Weight/Volume: 101.03 g

Date Analyzed: 10/05/2010 1424

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		2.9			
Sand		34.2			
Coarse Sand		0.2			
Medium Sand		2.0			
Fine Sand		32.0			
Silt		51.0			
Clay		11.9	7	62.9	

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1816-1

Sdg Number: A0J040425

Client Sample ID: FPS10-031

Lab Sample ID: 200-1816-7

Client Matrix: Solid

Date Sampled: 10/01/2010 1305

Date Received: 10/05/2010 1020

D422 Grain Size

Method: D422

Analysis Batch: 200-7549

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1816-B-7.txt

Dilution: 1.0

Initial Weight/Volume: 104.28 g

Date Analyzed: 10/05/2010 1429

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		15.1			
Coarse Sand		0.1			
Medium Sand		0.4			
Fine Sand		14.6			
Silt		73.4			
Clay		11.5			

84.9

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1816-1

Sdg Number: A0J040425

Client Sample ID: FPS10-032

Lab Sample ID: 200-1816-8

Client Matrix: Solid

Date Sampled: 10/01/2010 1405

Date Received: 10/05/2010 1020

D422 Grain Size

Method: D422

Analysis Batch: 200-7549

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1816-D-8.txt

Dilution: 1.0

Initial Weight/Volume: 104.88 g

Date Analyzed: 10/05/2010 1431

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		41.4			
Coarse Sand		0.0			
Medium Sand		1.2			
Fine Sand		40.2			
Silt		50.8			
Clay		7.8			

58.6

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1816-1

Sdg Number: A0J040425

Client Sample ID: FPS10-033

Lab Sample ID: 200-1816-9

Client Matrix: Solid

Date Sampled: 10/01/2010 1550

Date Received: 10/05/2010 1020

D422 Grain Size

Method: D422

Analysis Batch: 200-7549

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1816-B-9.txt

Dilution: 1.0

Initial Weight/Volume: 104.65 g

Date Analyzed: 10/05/2010 1438

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		13.7			
Coarse Sand		0.1			
Medium Sand		0.6			
Fine Sand		13.0			
Silt		74.6			
Clay		11.7			

40.3

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1816-1

Sdg Number: A0J040425

Client Sample ID: FPS10-034

Lab Sample ID: 200-1816-10

Date Sampled: 10/01/2010 1710

Client Matrix: Solid

Date Received: 10/05/2010 1020

D422 Grain Size

Method: D422

Analysis Batch: 200-7549

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1816-B-10.txt

Dilution: 1.0

Initial Weight/Volume: 103.08 g

Date Analyzed: 10/05/2010 1441

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		25.2			
Coarse Sand		0.1			
Medium Sand		0.5			
Fine Sand		24.6			
Silt		65.5			
Clay		9.3			

74.8

✓

Ruettgers Organics Corporation

Client Sample ID: FPS10-DUP8

GC Semivolatiles

Lot-Sample #...: A0J060517-002 Work Order #...: L73F51AD Matrix.....: SO
 Date Sampled...: 10/02/10 09:55 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/17/10
 Prep Batch #...: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.05 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 24 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	170	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96 DIL	(31 - 131)
Decachlorobiphenyl	97 DIL	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-035

GC Semivolatiles

Lot-Sample #...: A0J060517-004 Work Order #...: L73GK1AE Matrix.....: SO
 Date Sampled...: 10/02/10 10:30 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/17/10
 Prep Batch #...: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.02 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 24 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	110	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	120 DIL	(31 - 131)
Decachlorobiphenyl	125 DIL	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-036

GC Semivolatiles

Lot-Sample #...: A0J060517-007 Work Order #...: L73G71AE Matrix.....: SO
 Date Sampled...: 10/02/10 12:00 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/17/10
 Prep Batch #...: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.17 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 25 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	790 μ	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	148 DIL, *	(31 - 131)
Decachlorobiphenyl	152 DIL, *	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-037

GC Semivolatiles

Lot-Sample #....: A0J060517-010 Work Order #....: L73HL1AE Matrix.....: SO
 Date Sampled....: 10/02/10 13:10 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/17/10
 Prep Batch #....: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.11 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 28 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	440 J	46	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	124 DIL	(31 - 131)
Decachlorobiphenyl	154 DIL, *	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-038

GC Semivolatiles

Lot-Sample #...: A0J060517-013 Work Order #...: L73HT1AE Matrix.....: SO
 Date Sampled...: 10/02/10 14:25 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/17/10
 Prep Batch #...: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.07 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 15 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	470 J	39	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	116 DIL	(31 - 131)
Decachlorobiphenyl	160 DIL, *	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-039

GC Semivolatiles

Lot-Sample #...: A0J060517-016 Work Order #...: L73H21AE Matrix.....: SO
 Date Sampled...: 10/03/10 10:50 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/17/10
 Prep Batch #...: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.07 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 23 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	650	43	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	111 DIL	(31 - 131)
Decachlorobiphenyl	123 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-040

GC Semivolatiles

Lot-Sample #....: A0J060517-019	Work Order #....: L73H61AE	Matrix.....: SO
Date Sampled....: 10/03/10 12:15	Date Received...: 10/05/10	
Prep Date.....: 10/14/10	Analysis Date...: 10/17/10	
Prep Batch #....: 0287028		
Dilution Factor: 10	Initial Wgt/Vol: 30.08 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 26	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	360	45	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	118 DIL	(31 - 131)
Decachlorobiphenyl	119 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-041

GC Semivolatiles

Lot-Sample #....: A0J060517-022 Work Order #....: L73JA1AJ Matrix.....: SO
 Date Sampled....: 10/04/10 09:55 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/17/10
 Prep Batch #....: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.01 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 37 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	1100	53	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	123 DIL	(31 - 131)
Decachlorobiphenyl	149 DIL, *	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-044

GC Semivolatiles

Lot-Sample #....: A0J060517-031 Work Order #....: L73KK1AE Matrix.....: SO
 Date Sampled....: 10/04/10 13:20 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/17/10
 Prep Batch #....: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.07 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 43 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	670 J	58	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	214 DIL, *	(31 - 131)
Decachlorobiphenyl	158 DIL, *	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: FPS10-DUP9

GC Semivolatiles

Lot-Sample #...: A0J060517-032 Work Order #...: L73KW1AD Matrix.....: SO
 Date Sampled...: 10/04/10 13:20 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/18/10
 Prep Batch #...: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.14 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 41 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	620 J	56	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	136 DIL, *	(31 - 131)
Decachlorobiphenyl	194 DIL, *	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-045

GC Semivolatiles

Lot-Sample #...: A0J060517-035 Work Order #...: L73LQ1AE Matrix.....: SO
 Date Sampled...: 10/04/10 15:35 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/18/10
 Prep Batch #...: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.06 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 27 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	1400	45	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	126 DIL	(31 - 131)
Decachlorobiphenyl	127 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-046

GC Semivolatiles

Lot-Sample #....: A0J060517-038	Work Order #....: L73MH1AE	Matrix.....: SO
Date Sampled....: 10/04/10 16:20	Date Received...: 10/05/10	
Prep Date.....: 10/14/10	Analysis Date...: 10/18/10	
Prep Batch #....: 0287028		
Dilution Factor: 10	Initial Wgt/Vol: 30.1 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 35	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	910	51	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	133 DIL, *	(31 - 131)
Decachlorobiphenyl	147 DIL, *	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-047

GC Semivolatiles

Lot-Sample #....: A0J060517-041 Work Order #....: L73MR1AE Matrix.....: SO
 Date Sampled....: 10/05/10 09:15 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/18/10
 Prep Batch #....: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.17 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 28 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	600 J	46	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	4150 DIL, *	(31 - 131)
Decachlorobiphenyl	155 DIL, *	(18 - 145)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-048

GC Semivolatiles

Lot-Sample #....: A0J060517-044 Work Order #....: L73M01AE Matrix.....: SO
 Date Sampled....: 10/05/10 10:40 Date Received...: 10/05/10
 Prep Date.....: 10/14/10 Analysis Date...: 10/18/10
 Prep Batch #....: 0287028
 Dilution Factor: 10 Initial Wgt/Vol: 30.02 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 27 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	570 J	45	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	157 DIL, *	(31 - 131)
Decachlorobiphenyl	104 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-DUP8

General Chemistry

Lot-Sample #...: A0J060517-002 Work Order #...: L73F5 Matrix.....: SO
Date Sampled...: 10/02/10 09:55 Date Received...: 10/05/10
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	75.7	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
Dilution Factor: 1						
Total Organic Carbon	6900	1300	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
Dilution Factor: 1						

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-035

General Chemistry

Lot-Sample #...: A0J060517-004 Work Order #...: L73GK Matrix.....: SO
Date Sampled...: 10/02/10 10:30 Date Received...: 10/05/10
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	75.6	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
				Dilution Factor: 1		
Total Organic Carbon	5800	1300	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
				Dilution Factor: 1		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-036

General Chemistry

Lot-Sample #...: A0J060517-007 Work Order #...: L73G7 Matrix.....: SO
Date Sampled...: 10/02/10 12:00 Date Received...: 10/05/10
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	75.2	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
			Dilution Factor: 1			
Total Organic Carbon	7500	1300	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-037

General Chemistry

Lot-Sample #...: A0J060517-010 Work Order #...: L73HL Matrix.....: SO
Date Sampled...: 10/02/10 13:10 Date Received...: 10/05/10
% Moisture.....: 28

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	72.3	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
			Dilution Factor: 1			
Total Organic Carbon	5900	1400	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-038

General Chemistry

Lot-Sample #...: A0J060517-013 Work Order #...: L73HT Matrix.....: SO
Date Sampled...: 10/02/10 14:25 Date Received...: 10/05/10
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	84.7	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
			Dilution Factor: 1			
Total Organic Carbon	4600	1200	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-039

General Chemistry

Lot-Sample #...: A0J060517-016 Work Order #...: L73H2 Matrix.....: SO
Date Sampled...: 10/03/10 10:50 Date Received...: 10/05/10
% Moisture.....: 23

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	77.0	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
				Dilution Factor: 1		
Total Organic Carbon	3700	1300	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
				Dilution Factor: 1		

NOTE(S):

RL: Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Client Sample ID: FPS10-040

Lot-Sample #...: A0J060517-019 Work Order #...: L73H6 Matrix.....: SO
Date Sampled...: 10/03/10 12:15 Date Received...: 10/05/10
% Moisture.....: 26

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	73.8	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
	Dilution Factor: 1					
Total Organic Carbon	5100	1400	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286424
	Dilution Factor: 1					

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-041

General Chemistry

Lot-Sample #...: A0J060517-022 Work Order #...: L73JA Matrix.....: SO
Date Sampled...: 10/04/10 09:55 Date Received...: 10/05/10
% Moisture.....: 37

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	62.8	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
				Dilution Factor: 1		
Total Organic Carbon	1900 J	1600	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286421
				Dilution Factor: 1		

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-044

General Chemistry

Lot-Sample #....: A0J060517-031 Work Order #....: L73KK Matrix.....: SO
 Date Sampled....: 10/04/10 13:20 Date Received...: 10/05/10
 % Moisture.....: 43

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	57.3	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
	Dilution Factor: 1					
Total Organic Carbon	1200 <i>BT</i>	1700	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286421
	Dilution Factor: 1					

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Ruettgers Organics Corporation

Client Sample ID: FPS10-DUP9

General Chemistry

Lot-Sample #...: A0J060517-032 Work Order #...: L73KW Matrix.....: SO
Date Sampled...: 10/04/10 13:20 Date Received...: 10/05/10
% Moisture.....: 41

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	59.4	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
				Dilution Factor: 1		
Total Organic Carbon	1100 B J	1700	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286421
				Dilution Factor: 1		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Rutgers Organics Corporation

Client Sample ID: FPS10-045

General Chemistry

Lot-Sample #...: A0J060517-035 Work Order #...: L73LQ Matrix.....: SO
 Date Sampled...: 10/04/10 15:35 Date Received...: 10/05/10
 % Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	73.4	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
	Dilution Factor: 1					
Total Organic Carbon	1100 B J	1400	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286421
	Dilution Factor: 1					

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Ruettgers Organics Corporation

Client Sample ID: FPS10-046

General Chemistry

Lot-Sample #...: A0J060517-038 Work Order #...: L73MH Matrix.....: SO
 Date Sampled...: 10/04/10 16:20 Date Received...: 10/05/10
 % Moisture.....: 35

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	65.2	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
	Dilution Factor: 1					
Total Organic Carbon	1100 <i>B</i>	1500	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286421
	Dilution Factor: 1					

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Ruettgers Organics Corporation

Client Sample ID: FPS10-047

General Chemistry

Lot-Sample #...: A0J060517-041 Work Order #...: L73MR Matrix.....: SO
 Date Sampled...: 10/05/10 09:15 Date Received...: 10/05/10
 % Moisture.....: 28

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	72.2	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
	Dilution Factor: 1					
Total Organic Carbon	920 <i>JS</i>	1400	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286421
	Dilution Factor: 1					

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Ruettgers Organics Corporation

Client Sample ID: FPS10-048

General Chemistry

Lot-Sample #...: A0J060517-044 Work Order #...: L73M0 Matrix.....: SO
Date Sampled...: 10/05/10 10:40 Date Received...: 10/05/10
% Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	72.9	10.0	%	MCAWW 160.3 MOD	10/14-10/15/10	0287351
				Dilution Factor: 1		
Total Organic Carbon	4200	1400	mg/kg	MSA WALKLEY-BLACK	10/13/10	0286421
				Dilution Factor: 1		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-035

Lab Sample ID: 200-1858-1

Date Sampled: 10/02/2010 1030

Client Matrix: Solid

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1858-B-1.txt

Dilution: 1.0

Initial Weight/Volume: 137.72 g

Date Analyzed: 10/07/2010 2059

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.7			
Sand		31.3			
Coarse Sand		1.4			
Medium Sand		4.9			
Fine Sand		25.0			
Silt		55.1			
Clay		12.9			

> 68.0

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-036

Lab Sample ID: 200-1858-2

Client Matrix: Solid

Date Sampled: 10/02/2010 1200

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1858-B-2.txt

Dilution: 1.0

Initial Weight/Volume: 158.04 g

Date Analyzed: 10/07/2010 2118

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		34.0			
Coarse Sand		0.1			
Medium Sand		1.6			
Fine Sand		32.3			
Silt		55.2			
Clay		10.8			

66.0

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-037

Lab Sample ID: 200-1858-3

Client Matrix: Solid

Date Sampled: 10/02/2010 1310

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1858-B-3.txt

Dilution: 1.0

Initial Weight/Volume: 145.9 g

Date Analyzed: 10/07/2010 2120

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		27.2			
Coarse Sand		0.0			
Medium Sand		1.9			
Fine Sand		25.3			
Silt		60.0			
Clay		12.8			

72.8

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-038

Lab Sample ID: 200-1858-4

Client Matrix: Solid

Date Sampled: 10/02/2010 1425

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1858-B-4.txt

Dilution: 1.0

Initial Weight/Volume: 133.47 g

Date Analyzed: 10/07/2010 2122

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		53.1			
Coarse Sand		0.0			
Medium Sand		7.0			
Fine Sand		46.1			
Silt		42.0			
Clay		4.9			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-039

Lab Sample ID: 200-1858-5

Client Matrix: Solid

Date Sampled: 10/03/2010 1050

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1858-B-5.txt

Dilution: 1.0

Initial Weight/Volume: 159.22 g

Date Analyzed: 10/07/2010 2125

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		58.6			
Coarse Sand		0.2			
Medium Sand		4.0			
Fine Sand		54.4			
Silt		31.0			
Clay		10.4			

41.4

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-040

Lab Sample ID: 200-1858-6

Client Matrix: Solid

Date Sampled: 10/03/2010 1215

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1858-B-6.txt

Dilution: 1.0

Initial Weight/Volume: 158.32 g

Date Analyzed: 10/07/2010 2127

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		1.6			
Sand		48.1			
Coarse Sand		0.9			
Medium Sand		7.9			
Fine Sand		39.3			
Silt		37.4			
Clay		12.9			

50.3

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-041

Lab Sample ID: 200-1858-7

Client Matrix: Solid

Date Sampled: 10/04/2010 0955

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1858-D-7.txt

Dilution: 1.0

Initial Weight/Volume: 137.28 g

Date Analyzed: 10/07/2010 2140

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		24.6			
Coarse Sand		0.0			
Medium Sand		0.5			
Fine Sand		24.1			
Silt		60.9			
Clay		14.5			

75.4

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-044

Lab Sample ID: 200-1858-8

Client Matrix: Solid

Date Sampled: 10/04/2010 1320

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID:

D422_import

Preparation: N/A

Lab File ID:

200-1858-B-8.txt

Dilution: 1.0

Initial Weight/Volume:

101.13 g

Date Analyzed: 10/07/2010 2147

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		10.3			
Coarse Sand		0.2			
Medium Sand		0.7			
Fine Sand		9.4			
Silt		65.4			
Clay		24.3			

7 89.7

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-045

Lab Sample ID: 200-1858-9

Client Matrix: Solid

Date Sampled: 10/04/2010 1535

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1858-B-9.txt

Dilution: 1.0

Initial Weight/Volume: 150.87 g

Date Analyzed: 10/07/2010 2151

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		25.1			
Coarse Sand		0.0			
Medium Sand		1.0			
Fine Sand		24.1			
Silt		61.4			
Clay		13.5			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-046

Lab Sample ID: 200-1858-10

Client Matrix: Solid

Date Sampled: 10/04/2010 1620

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1858-B-10.txt

Dilution: 1.0

Initial Weight/Volume: 100.27 g

Date Analyzed: 10/07/2010 2154

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		15.4			
Coarse Sand		0.1			
Medium Sand		0.4			
Fine Sand		14.9			
Silt		64.6			
Clay		20.0			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-1858-1

Sdg Number: A0J060517

Client Sample ID: FPS10-048

Lab Sample ID: 200-1858-12

Client Matrix: Solid

Date Sampled: 10/05/2010 1040

Date Received: 10/07/2010 1010

D422 Grain Size

Method: D422

Analysis Batch: 200-7686

Instrument ID: D422_import

Preparation: N/A

Lab File ID: 200-1858-B-12.txt

Dilution: 1.0

Initial Weight/Volume: 117.93 g

Date Analyzed: 10/07/2010 2157

Final Weight/Volume:

Date Prepared:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.5			
Sand		42.1			
Coarse Sand		0.4			
Medium Sand		3.4			
Fine Sand		38.3			
Silt		48.2			
Clay		9.2			

57.4

✓

Ruetgers Organics Corporation

Client Sample ID: FPS10-042

GC Semivolatiles

Lot-Sample #...: A1C080536-001 Work Order #...: MFC391AC Matrix.....: SO
 Date Sampled...: 10/04/10 11:15 Date Received...: 10/05/10
 Prep Date.....: 03/09/11 Analysis Date...: 03/15/11
 Prep Batch #...: 1068030
 Dilution Factor: 2 Initial Wgt/Vol: 30.01 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 34 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	220	10	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(31 - 131)
Decachlorobiphenyl	88	(18 - 145)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-043

GC Semivolatiles

Lot-Sample #....: A1C080536-002 Work Order #....: MFC4D1AC Matrix.....: SO
Date Sampled....: 10/04/10 12:20 Date Received...: 10/05/10
Prep Date.....: 03/09/11 Analysis Date...: 03/15/11
Prep Batch #....: 1068030
Dilution Factor: 2 Initial Wgt/Vol: 30.03 g Final Wgt/Vol...: 10 mL
% Moisture.....: 37 Method.....: SW846 8081B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Mirex	280	11	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Tetrachloro-m-xylene	91	(31 - 131)
Decachlorobiphenyl	121	(18 - 145)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-042

General Chemistry

Lot-Sample #...: A1C080536-001 Work Order #...: MFC39 Matrix.....: SO
Date Sampled...: 10/04/10 11:15 Date Received...: 10/05/10
% Moisture.....: 34

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	65.8	10.0	%	MCAWW 160.3 MOD	03/16-03/17/11	1075163

Dilution Factor: 1

Rueters Organics Corporation

Client Sample ID: FPS10-043

General Chemistry

Lot-Sample #...: A1C080536-002 Work Order #...: MFC4D Matrix.....: SO
Date Sampled...: 10/04/10 12:20 Date Received...: 10/05/10
% Moisture.....: 37

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	62.8	10.0	%	MCAWW 160.3 MOD	03/16-03/17/11	1075163

Dilution Factor: 1

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4885-1

Sdg Number: A1D250475

Client Sample ID: FPS10-042

Lab Sample ID: 200-4885-1

Date Sampled: 10/04/2010 1115

Client Matrix: Solid

Date Received: 04/26/2011 1240

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-17431

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4885-A-1.txt

Dilution: 1.0

Initial Weight/Volume: 78.63 g

Analysis Date: 04/27/2011 2127

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.2			
Sand		28.0			
Coarse Sand		0.6			
Medium Sand		1.7			
Fine Sand		25.7			
Silt		53.8			
Clay		18.0			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4885-1

Sdg Number: A1D250475

Client Sample ID: FPS10-043

Lab Sample ID: 200-4885-2

Client Matrix: Solid

Date Sampled: 10/04/2010 1220

Date Received: 04/26/2011 1240

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-17431

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4885-A-2.txt

Dilution: 1.0

Initial Weight/Volume: 82.33 g

Analysis Date: 04/27/2011 2131

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		14.3			
Coarse Sand		0.3			
Medium Sand		1.6			
Fine Sand		12.4			
Silt		61.8			
Clay		23.9			

85.7

Ruettgers Organics Corporation

Client Sample ID: FPS10-054

GC Semivolatiles

Lot-Sample #....: A1C300562-003	Work Order #....: MGDP91AE	Matrix.....: SO
Date Sampled....: 03/29/11 09:45	Date Received...: 03/30/11	
Prep Date.....: 04/04/11	Analysis Date...: 04/12/11	
Prep Batch #....: 1094042		
Dilution Factor: 50	Initial Wgt/Vol: 29.99 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 27	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Mirex	970	230	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	130 DIL	(31 - 131)
Decachlorobiphenyl	188 DIL, *	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-056

GC Semivolatiles

Lot-Sample #....: A1C300562-009 Work Order #....: MGDQH1AE Matrix.....: SO
Date Sampled...: 03/29/11 11:50 Date Received...: 03/30/11
Prep Date.....: 04/04/11 Analysis Date...: 04/12/11
Prep Batch #....: 1094042
Dilution Factor: 50 Initial Wgt/Vol: 30.1 g Final Wgt/Vol...: 10 mL
% Moisture.....: 30 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	470 J	240	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	132 DIL, *	(31 - 131)
Decachlorobiphenyl	84 DIL	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-057

GC Semivolatiles

Lot-Sample #....: A1C300562-012 Work Order #....: MGDQL1AE Matrix.....: SO
 Date Sampled....: 03/29/11 14:00 Date Received...: 03/30/11
 Prep Date.....: 04/04/11 Analysis Date...: 04/12/11
 Prep Batch #....: 1094042
 Dilution Factor: 100 Initial Wgt/Vol: 29.92 g Final Wgt/Vol...: 10 mL
 % Moisture.....: 29 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	980 J	460	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	139 DIL, *	(31 - 131)
Decachlorobiphenyl	893 DIL, *	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Rueters Organics Corporation

Client Sample ID: FPS10-057FD

GC Semivolatiles

Lot-Sample #....: A1C300562-013	Work Order #....: MGDQM1AD	Matrix.....: SO
Date Sampled...: 03/29/11 14:00	Date Received...: 03/30/11	
Prep Date.....: 04/04/11	Analysis Date...: 04/12/11	
Prep Batch #....: 1094042		
Dilution Factor: 100	Initial Wgt/Vol: 30.04 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 29	Method.....: SW846 8081B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	1000 J	470	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	194 DIL, *	(31 - 131)
Decachlorobiphenyl	0.0 DIL, *	(18 - 145)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-058

GC Semivolatiles

Lot-Sample #....: A1C300562-016	Work Order #....: MGDQQ1AE	Matrix.....: SO
Date Sampled....: 03/29/11 15:25	Date Received...: 03/30/11	
Prep Date.....: 04/04/11	Analysis Date...: 04/13/11	
Prep Batch #....: 1094042		
Dilution Factor: 100	Initial Wgt/Vol: 30.02 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 28	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Mirex	730 PG J	460	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	
Tetrachloro-m-xylene	383 DIL, *	(31 - 131)	
Decachlorobiphenyl	482 DIL, *	(18 - 145)	

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Ruettgers Organics Corporation

Client Sample ID: FPS10-053

GC Semivolatiles

Lot-Sample #....: A1C300593-015	Work Order #....: MGD1L1AE	Matrix.....: SO
Date Sampled....: 03/28/11 15:05	Date Received...: 03/29/11	
Prep Date.....: 04/04/11	Analysis Date...: 04/13/11	
Prep Batch #....: 1094042		
Dilution Factor: 100	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 35	Method.....: SW846 8081B	

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>UNITS</u>
Mirex	740 pg J	510	ug/kg
 <u>SURROGATE</u>	 <u>PERCENT</u>	 <u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
Tetrachloro-m-xylene	136 DIL, *	(31 - 131)	
Decachlorobiphenyl	213 DIL, *	(18 - 145)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Ruetgers Organics Corporation

Client Sample ID: FPS10-053 FD

GC Semivolatiles

Lot-Sample #....: A1C300593-016	Work Order #....: MGD1M1AD	Matrix.....: SO
Date Sampled...: 03/28/11 15:05	Date Received...: 03/29/11	
Prep Date.....: 04/04/11	Analysis Date...: 04/13/11	
Prep Batch #....: 1094042		
Dilution Factor: 100	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 10 mL
% Moisture.....: 32	Method.....: SW846 8081B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	710 pg J	490	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Tetrachloro-m-xylene	224 DIL, *	(31 - 131)	
Decachlorobiphenyl	150 DIL, *	(18 - 145)	

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Ruettgers Organics Corporation

Client Sample ID: FPS10-066

GC Semivolatiles

Lot-Sample #....: A1C310607-009 Work Order #....: MGFTD1AE Matrix.....: SO
Date Sampled....: 03/31/11 11:25 Date Received...: 03/31/11
Prep Date.....: 04/04/11 Analysis Date...: 04/13/11
Prep Batch #....: 1094042
Dilution Factor: 10 Initial Wgt/Vol: 30.08 g Final Wgt/Vol...: 10 mL
% Moisture.....: 31 Method.....: SW846 8081B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Mirex	140	48	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	221 DIL, *	(31 - 131)
Decachlorobiphenyl	192 DIL, *	(18 - 145)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Ruetgers Organics Corporation

Client Sample ID: FPS10-054

General Chemistry

Lot-Sample #...: A1C300562-003 Work Order #...: MGDP9 Matrix.....: SO
Date Sampled...: 03/29/11 09:45 Date Received...: 03/30/11
% Moisture.....: 27

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	72.6	10.0	%	MCAWW 160.3 MOD	03/31-04/01/11	1090271
Dilution Factor: 1						
Total Organic Carbon	34000 J	6900	mg/kg	MSA WALKLEY-BLACK	04/12/11	1102074
Dilution Factor: 5						

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Rueters Organics Corporation

Client Sample ID: FPS10-056

General Chemistry

Lot-Sample #...: A1C300562-009 Work Order #...: MGDQH Matrix.....: SO
Date Sampled...: 03/29/11 11:50 Date Received...: 03/30/11
% Moisture.....: 30

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	69.7	10.0	%	MCAWW 160.3 MOD	03/31-04/01/11	1090271
			Dilution Factor: 1			
Total Organic Carbon	7900 J	1400	mg/kg	MSA WALKLEY-BLACK	04/12/11	1102074
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Ruettgers Organics Corporation

Client Sample ID: FPS10-057

General Chemistry

Lot-Sample #...: A1C300562-012 Work Order #...: MGDQL Matrix.....: SO
Date Sampled...: 03/29/11 14:00 Date Received...: 03/30/11
% Moisture.....: 29

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	71.2	10.0	%	MCAWW 160.3 MOD	03/31-04/01/11	1090271
			Dilution Factor: 1			
Total Organic Carbon	17000 J	1400	mg/kg	MSA WALKLEY-BLACK	04/12/11	1102074
			Dilution Factor: 1			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Client Sample ID: FPS10-057FD

Lot-Sample #.... A1C300562-013 Work Order #.... MGDQM Matrix.....: SO
Date Sampled.... 03/29/11 14:00 Date Received..: 03/30/11
% Moisture..... 29

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	70.9	10.0	%	MCAWW 160.3 MOD	03/31-04/01/11	1090271
	Dilution Factor: 1					
Total Organic Carbon	19000 J	7100	mg/kg	MSA WALKLEY-BLACK	04/12/11	1102074
	Dilution Factor: 5					

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Ruettgers Organics Corporation

Client Sample ID: FPS10-058

General Chemistry

Lot-Sample #...: A1C300562-016 Work Order #...: MGDQQ Matrix.....: SO
Date Sampled...: 03/29/11 15:25 Date Received...: 03/30/11
% Moisture.....: 28

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	72.1	10.0	%	MCAWW 160.3 MOD	03/31-04/01/11	1090271
			Dilution Factor: 1			
Total Organic Carbon	32000 J	6900	mg/kg	MSA WALKLEY-BLACK	04/12/11	1102074
			Dilution Factor: 5			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Rueters Organics Corporation

Client Sample ID: FPS10-053

General Chemistry

Lot-Sample #...: A1C300593-015 Work Order #...: MGD1L Matrix.....: SO
Date Sampled...: 03/28/11 15:05 Date Received...: 03/29/11
% Moisture.....: 35

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	65.0	10.0	%	MCAWW 160.3 MOD	03/31-04/01/11	1090271
Dilution Factor: 1						
Total Organic Carbon	31000	7700	mg/kg	MSA WALKLEY-BLACK	04/11/11	1101254
Dilution Factor: 5						

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-053 FD

General Chemistry

Lot-Sample #...: A1C300593-016 Work Order #...: MGD1M Matrix.....: SO
Date Sampled...: 03/28/11 15:05 Date Received...: 03/29/11
% Moisture.....: 32

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	67.7	10.0	%	MCAWW 160.3 MOD	03/31-04/01/11	1090271
			Dilution Factor: 1			
Total Organic Carbon	33000	7400	mg/kg	MSA WALKLEY-BLACK	04/11/11	1101254
			Dilution Factor: 5			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Ruettgers Organics Corporation

Client Sample ID: FPS10-066

General Chemistry

Lot-Sample #...: A1C310607-009 Work Order #...: MGFTD Matrix.....: SO
Date Sampled...: 03/31/11 11:25 Date Received...: 03/31/11
% Moisture.....: 31

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	69.3	10.0	%	MCAWW 160.3 MOD	04/01-04/02/11	1091125
Dilution Factor: 1						
Total Organic Carbon	39000 J	7200	mg/kg	MSA WALKLEY-BLACK	04/12/11	1102074
Dilution Factor: 5						

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4528-1

Sdg Number: A1C310607

Client Sample ID: FPS10-066

Lab Sample ID: 200-4528-1

Date Sampled: 03/31/2011 1125

Client Matrix: Solid

Date Received: 04/02/2011 0930

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	200-16270	Instrument ID:	D422_import
	N/A	Prep Batch:	N/A	Lab File ID:	200-4528-A-1.txt
Dilution:	1.0			Initial Weight/Volume:	133.97 g
Analysis Date:	04/05/2011 2135			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (% Passing)	Qualifier	NONE	NONE
Sieve Size 3 inch - Percent Finer		100.0			
Sieve Size 2 inch - Percent Finer		100.0			
Sieve Size 1.5 inch - Percent Finer		100.0			
Sieve Size 1 inch - Percent Finer		100.0			
Sieve Size 0.75 inch - Percent Finer		100.0			
Sieve Size 0.375 inch - Percent Finer		100.0			
Sieve Size #4 - Percent Finer		100.0			
Sieve Size #10 - Percent Finer		99.0			
Sieve Size #20 - Percent Finer		97.2			
Sieve Size #40 - Percent Finer		91.8			
Sieve Size #60 - Percent Finer		82.7			
Sieve Size #80 - Percent Finer		75.0			
Sieve Size #100 - Percent Finer		72.0			
Sieve Size #200 - Percent Finer		63.5			
Hydrometer Reading 1 - Percent Finer		37.7			
Hydrometer Reading 2 - Percent Finer		29.9			
Hydrometer Reading 3 - Percent Finer		22.1			
Hydrometer Reading 4 - Percent Finer		17.8			
Hydrometer Reading 5 - Percent Finer		13.5			
Hydrometer Reading 6 - Percent Finer		7.4			
Hydrometer Reading 7 - Percent Finer		3.1			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4528-1

Sdg Number: A1C310607

Client Sample ID: FPS10-066

Lab Sample ID: 200-4528-1

Client Matrix: Solid

Date Sampled: 03/31/2011 1125

Date Received: 04/02/2011 0930

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16270

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4528-A-1.txt

Dilution: 1.0

Initial Weight/Volume: 133.97 g

Analysis Date: 04/05/2011 2135

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		36.5			
Coarse Sand		1.0			
Medium Sand		7.2			
Fine Sand		28.3			
Silt		50.0			
Clay		13.5			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-054

Lab Sample ID: 200-4493-1

Date Sampled: 03/29/2011 0945

Client Matrix: Solid

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16139

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4493-A-1.txt

Dilution: 1.0

Initial Weight/Volume: 148.26 g

Analysis Date: 04/04/2011 2028

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (% Passing)	Qualifier	NONE	NONE
Sieve Size 3 inch - Percent Finer		100.0			
Sieve Size 2 inch - Percent Finer		100.0			
Sieve Size 1.5 inch - Percent Finer		100.0			
Sieve Size 1 inch - Percent Finer		100.0			
Sieve Size 0.75 inch - Percent Finer		100.0			
Sieve Size 0.375 inch - Percent Finer		100.0			
Sieve Size #4 - Percent Finer		100.0			
Sieve Size #10 - Percent Finer		99.7			
Sieve Size #20 - Percent Finer		98.9			
Sieve Size #40 - Percent Finer		95.6			
Sieve Size #60 - Percent Finer		81.5			
Sieve Size #80 - Percent Finer		72.5			
Sieve Size #100 - Percent Finer		69.7			
Sieve Size #200 - Percent Finer		60.9			
Hydrometer Reading 1 - Percent Finer		30.6			
Hydrometer Reading 2 - Percent Finer		23.2			
Hydrometer Reading 3 - Percent Finer		15.7			
Hydrometer Reading 4 - Percent Finer		12.8			
Hydrometer Reading 5 - Percent Finer		9.8			
Hydrometer Reading 6 - Percent Finer		5.3			
Hydrometer Reading 7 - Percent Finer		2.4			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-054

Lab Sample ID: 200-4493-1

Date Sampled: 03/29/2011 0945

Client Matrix: Solid

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16139

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4493-A-1.txt

Dilution: 1.0

Initial Weight/Volume: 148.26 g

Analysis Date: 04/04/2011 2028

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		39.1			
Coarse Sand		0.3			
Medium Sand		4.1			
Fine Sand		34.7			
Silt		51.1			
Clay		9.8			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-056

Lab Sample ID: 200-4493-2

Date Sampled: 03/29/2011 1150

Client Matrix: Solid

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16139

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4493-A-2.txt

Dilution: 1.0

Initial Weight/Volume: 113.72 g

Analysis Date: 04/04/2011 2030

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (% Passing)	Qualifier	NONE	NONE
Sieve Size 3 inch - Percent Finer		100.0			
Sieve Size 2 inch - Percent Finer		100.0			
Sieve Size 1.5 inch - Percent Finer		100.0			
Sieve Size 1 inch - Percent Finer		100.0			
Sieve Size 0.75 inch - Percent Finer		100.0			
Sieve Size 0.375 inch - Percent Finer		100.0			
Sieve Size #4 - Percent Finer		99.0			
Sieve Size #10 - Percent Finer		98.0			
Sieve Size #20 - Percent Finer		97.9			
Sieve Size #40 - Percent Finer		96.8			
Sieve Size #60 - Percent Finer		94.9			
Sieve Size #80 - Percent Finer		88.7			
Sieve Size #100 - Percent Finer		86.1			
Sieve Size #200 - Percent Finer		74.4			
Hydrometer Reading 1 - Percent Finer		49.6			
Hydrometer Reading 2 - Percent Finer		39.5			
Hydrometer Reading 3 - Percent Finer		30.4			
Hydrometer Reading 4 - Percent Finer		26.4			
Hydrometer Reading 5 - Percent Finer		21.4			
Hydrometer Reading 6 - Percent Finer		13.3			
Hydrometer Reading 7 - Percent Finer		8.2			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-056

Lab Sample ID: 200-4493-2

Date Sampled: 03/29/2011 1150

Client Matrix: Solid

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16139

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4493-A-2.txt

Dilution: 1.0

Initial Weight/Volume: 113.72 g

Analysis Date: 04/04/2011 2030

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		1.0			
Sand		24.6			
Coarse Sand		1.0			
Medium Sand		1.2			
Fine Sand		22.4			
Silt		53.0			
Clay		21.4			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-057

Lab Sample ID: 200-4493-3

Date Sampled: 03/29/2011 1400

Client Matrix: Solid

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16139

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4493-A-3.txt

Dilution: 1.0

Initial Weight/Volume: 102 g

Analysis Date: 04/04/2011 2033

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (% Passing)	Qualifier	NONE	NONE
Sieve Size 3 inch - Percent Finer		100.0			
Sieve Size 2 inch - Percent Finer		100.0			
Sieve Size 1.5 inch - Percent Finer		100.0			
Sieve Size 1 inch - Percent Finer		100.0			
Sieve Size 0.75 inch - Percent Finer		100.0			
Sieve Size 0.375 inch - Percent Finer		100.0			
Sieve Size #4 - Percent Finer		100.0			
Sieve Size #10 - Percent Finer		99.7			
Sieve Size #20 - Percent Finer		99.6			
Sieve Size #40 - Percent Finer		98.6			
Sieve Size #60 - Percent Finer		95.7			
Sieve Size #80 - Percent Finer		87.5			
Sieve Size #100 - Percent Finer		83.7			
Sieve Size #200 - Percent Finer		67.1			
Hydrometer Reading 1 - Percent Finer		39.0			
Hydrometer Reading 2 - Percent Finer		32.3			
Hydrometer Reading 3 - Percent Finer		23.4			
Hydrometer Reading 4 - Percent Finer		19.0			
Hydrometer Reading 5 - Percent Finer		14.6			
Hydrometer Reading 6 - Percent Finer		10.2			
Hydrometer Reading 7 - Percent Finer		6.8			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-057

Lab Sample ID: 200-4493-3

Date Sampled: 03/29/2011 1400

Client Matrix: Solid

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16139

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4493-A-3.txt

Dilution: 1.0

Initial Weight/Volume: 102 g

Analysis Date: 04/04/2011 2033

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		32.9			
Coarse Sand		0.3			
Medium Sand		1.1			
Fine Sand		31.5			
Silt		52.5			
Clay		14.6			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-058

Lab Sample ID: 200-4493-4

Date Sampled: 03/29/2011 1525

Client Matrix: Solid

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16139

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4493-A-4.txt

Dilution: 1.0

Initial Weight/Volume: 140.64 g

Analysis Date: 04/04/2011 2036

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (% Passing)	Qualifier	NONE	NONE
Sieve Size 3 inch - Percent Finer		100.0			
Sieve Size 2 inch - Percent Finer		100.0			
Sieve Size 1.5 inch - Percent Finer		100.0			
Sieve Size 1 inch - Percent Finer		100.0			
Sieve Size 0.75 inch - Percent Finer		100.0			
Sieve Size 0.375 inch - Percent Finer		100.0			
Sieve Size #4 - Percent Finer		100.0			
Sieve Size #10 - Percent Finer		99.5			
Sieve Size #20 - Percent Finer		99.2			
Sieve Size #40 - Percent Finer		97.8			
Sieve Size #60 - Percent Finer		92.1			
Sieve Size #80 - Percent Finer		82.9			
Sieve Size #100 - Percent Finer		78.2			
Sieve Size #200 - Percent Finer		61.0			
Hydrometer Reading 1 - Percent Finer		31.0			
Hydrometer Reading 2 - Percent Finer		24.1			
Hydrometer Reading 3 - Percent Finer		17.9			
Hydrometer Reading 4 - Percent Finer		14.0			
Hydrometer Reading 5 - Percent Finer		10.9			
Hydrometer Reading 6 - Percent Finer		7.1			
Hydrometer Reading 7 - Percent Finer		4.0			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-058

Lab Sample ID: 200-4493-4

Date Sampled: 03/29/2011 1525

Client Matrix: Solid

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16139

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4493-A-4.txt

Dilution: 1.0

Initial Weight/Volume: 140.64 g

Analysis Date: 04/04/2011 2036

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		39.0			
Coarse Sand		0.5			
Medium Sand		1.7			
Fine Sand		36.8			
Silt		50.1			
Clay		10.9			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4492-1

Sdg Number: AIC300593

Client Sample ID: FPS10-053

Lab Sample ID: 200-4492-1

Date Sampled: 03/28/2011 1505

Client Matrix: Solid

Date Received: 04/01/2011 1104

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16138

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4492-A-1.txt

Dilution: 1.0

Initial Weight/Volume: 135.25 g

Analysis Date: 04/04/2011 2024

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (% Passing)	Qualifier	NONE	NONE
Sieve Size 3 inch - Percent Finer		100.0			
Sieve Size 2 inch - Percent Finer		100.0			
Sieve Size 1.5 inch - Percent Finer		100.0			
Sieve Size 1 inch - Percent Finer		100.0			
Sieve Size 0.75 inch - Percent Finer		100.0			
Sieve Size 0.375 inch - Percent Finer		100.0			
Sieve Size #4 - Percent Finer		100.0			
Sieve Size #10 - Percent Finer		99.5			
Sieve Size #20 - Percent Finer		99.3			
Sieve Size #40 - Percent Finer		97.5			
Sieve Size #60 - Percent Finer		95.9			
Sieve Size #80 - Percent Finer		92.8			
Sieve Size #100 - Percent Finer		91.5			
Sieve Size #200 - Percent Finer		83.9			
Hydrometer Reading 1 - Percent Finer		43.6			
Hydrometer Reading 2 - Percent Finer		34.8			
Hydrometer Reading 3 - Percent Finer		24.1			
Hydrometer Reading 4 - Percent Finer		18.8			
Hydrometer Reading 5 - Percent Finer		13.5			
Hydrometer Reading 6 - Percent Finer		8.1			
Hydrometer Reading 7 - Percent Finer		3.7			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4492-1

Sdg Number: AIC300593

Client Sample ID: FPS10-053

Lab Sample ID: 200-4492-1

Date Sampled: 03/28/2011 1505

Client Matrix: Solid

Date Received: 04/01/2011 1104

D422 Grain Size

Analysis Method: D422
N/A

Analysis Batch: 200-16138
Prep Batch: N/A

Instrument ID: D422_import
Lab File ID: 200-4492-A-1.txt
Initial Weight/Volume: 135.25 g
Final Weight/Volume:

Dilution: 1.0
Analysis Date: 04/04/2011 2024
Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		16.1			
Coarse Sand		0.5			
Medium Sand		2.0			
Fine Sand		13.6			
Silt		70.4			
Clay		13.5			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-054

Lab Sample ID: 200-4493-1

Client Matrix: Solid

Date Sampled: 03/29/2011 0945

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16139

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4493-A-1.txt

Dilution: 1.0

Initial Weight/Volume: 148.26 g

Analysis Date: 04/04/2011 2028

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		39.1			
Coarse Sand		0.3			
Medium Sand		4.1			
Fine Sand		34.7			
Silt		51.1			
Clay		9.8			

60.9

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-056

Lab Sample ID: 200-4493-2

Client Matrix: Solid

Date Sampled: 03/29/2011 1150

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422
N/A

Analysis Batch: 200-16139
Prep Batch: N/A

Instrument ID: D422_import
Lab File ID: 200-4493-A-2.txt
Initial Weight/Volume: 113.72 g
Final Weight/Volume:

Dilution: 1.0
Analysis Date: 04/04/2011 2030
Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		1.0			
Sand		24.6			
Coarse Sand		1.0			
Medium Sand		1.2			
Fine Sand		22.4			
Silt		53.0			
Clay		21.4			

74.4

✓

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-057

Lab Sample ID: 200-4493-3

Client Matrix: Solid

Date Sampled: 03/29/2011 1400

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

N/A

Analysis Batch: 200-16139

Prep Batch: N/A

Instrument ID: D422_import

Lab File ID: 200-4493-A-3.txt

Dilution: 1.0

Analysis Date: 04/04/2011 2033

Initial Weight/Volume: 102 g

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		32.9			
Coarse Sand		0.3			
Medium Sand		1.1			
Fine Sand		31.5			
Silt		52.5			
Clay		14.6			

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4493-1

Sdg Number: A13C00562

Client Sample ID: FPS10-058

Lab Sample ID: 200-4493-4

Client Matrix: Solid

Date Sampled: 03/29/2011 1525

Date Received: 04/01/2011 1010

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16139

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4493-A-4.txt

Dilution: 1.0

Initial Weight/Volume: 140.64 g

Analysis Date: 04/04/2011 2036

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		39.0			
Coarse Sand		0.5			
Medium Sand		1.7			
Fine Sand		36.8			
Silt		50.1			
Clay		10.9			

61.0

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4492-1

Sdg Number: AIC300593

Client Sample ID: FPS10-053

Lab Sample ID: 200-4492-1

Date Sampled: 03/28/2011 1505

Client Matrix: Solid

Date Received: 04/01/2011 1104

D422 Grain SizeAnalysis Method: D422
N/AAnalysis Batch: 200-16138
Prep Batch: N/AInstrument ID: D422_import
Lab File ID: 200-4492-A-1.txtDilution: 1.0
Analysis Date: 04/04/2011 2024
Prep Date: N/AInitial Weight/Volume: 135.25 g
Final Weight/Volume:

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		16.1			
Coarse Sand		0.5			
Medium Sand		2.0			
Fine Sand		13.6			
Silt		70.4			
Clay		13.5			

83.9

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 200-4528-1

Sdg Number: A1C310607

Client Sample ID: FPS10-066

Lab Sample ID: 200-4528-1

Date Sampled: 03/31/2011 1125

Client Matrix: Solid

Date Received: 04/02/2011 0930

D422 Grain Size

Analysis Method: D422

Analysis Batch: 200-16270

Instrument ID: D422_import

N/A

Prep Batch: N/A

Lab File ID: 200-4528-A-1.txt

Dilution: 1.0

Initial Weight/Volume: 133.97 g

Analysis Date: 04/05/2011 2135

Final Weight/Volume:

Prep Date: N/A

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Sand		36.5			
Coarse Sand		1.0			
Medium Sand		7.2			
Fine Sand		28.3			
Silt		50.0			
Clay		13.5			

63.5

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130669	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 14:25	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-12.5-WS-F		

Aliquot: 130669-FSHC-2	Units: ug/kg	Prep Date: 05/20/2011	Begin 05/23/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	58.2	29.8	3	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	66	38.8	110.4	1	

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130670	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 14:25	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-12.5-WS-O		

Aliquot: 130670-FSHC-2	Units: ug/kg	Prep Date: 05/24/2011	Begin 05/26/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	189	99.6	10	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	59	38.8	110.4	1	

Field Comments	Mirex requested
Lab Comments	
QC / Sample Comments	
Approved By	<div></div> <div>On</div> <div></div>

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130671	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 14:25	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-12.5-CC-F		

Aliquot: 130671-FSHC-2	Units: ug/kg	Prep Date: 05/20/2011	Begin 05/23/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	121	49.7	5	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	80	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130672	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 14:25	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-12.5-CC-O		

Aliquot: 130672-FSHC-2	Units: ug/kg	Prep Date: 05/23/2011	Begin 05/25/2011	End 05/25/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	05/27/2011	

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	444	193	20	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	52	38.8	110.4	1	

Field Comments Mirex requested

Lab Comments 5 Fish

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130673	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-YB-F		

Aliquot: 130673-FSHC-2	Units: ug/kg	Prep Date: 05/20/2011	Begin 05/23/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	324	99.8	10	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	85	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130674	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-YB-O		

Aliquot: 130674-FSHC-2	Units: ug/kg	Prep Date: 05/20/2011	Begin 05/23/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	1650	497	50	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	79	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130675	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-WS-F		

Aliquot: 130675-FSHC-2 \ 1	Units: ug/kg	Prep Date: 05/20/2011	Begin: 05/20/2011	End: 05/23/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	05/25/2011	05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	286	99.4	10	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	58	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130676	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-WS-O		

Aliquot: 130676-FSHC-2	Units: ug/kg	Prep Date: 05/20/2011	Begin 05/23/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	1470	499	50	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	48	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130677	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-CC-F		

Aliquot: 130677-FSHC-2	Units: ug/kg	Prep Date: 05/23/2011	Begin: 05/23/2011	End: 05/25/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	05/25/2011	05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	516	194	20	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	62	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130678	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-CC-O		

Aliquot: 130678-FSHC-2	Units: ug/kg	Prep Date: 05/24/2011	Begin 05/26/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	1300	498	50	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	53	38.8	110.4	1	

Field Comments Mirex requested

Lab Comments 2 fish

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130680	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 09:15	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-33.3-WS-O		

Aliquot: 130680-FSHC-2	Units: ug/kg	Prep Date: 05/23/2011	Begin 05/25/2011	End 05/25/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	05/27/2011	

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	1020	484	50	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	55	38.8	110.4	1	

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130681	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 09:15	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-33.3-WS-F		

Aliquot: 130681-FSHC-2	Units: ug/kg	Prep Date: 05/23/2011	Begin 05/25/2011	End 05/25/2011
Analyst: JNATYER		Analysis Date: 05/25/2011	05/27/2011	

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	130	49.2	5	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	59	38.8	110.4	1	

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130682	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 09:15	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-33.3-CC-F		

Aliquot: 130682-FSHC-2	Units: ug/kg	Prep Date: 05/23/2011	Begin 05/25/2011	End 05/25/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	05/27/2011	

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	1220	498	50	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	65	38.8	110.4	1	

Field Comments Mirex requested

Lab Comments jar

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130683	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 12:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-35.4-WS-F		

Aliquot: 130683-FSHC-2 \ 1	Units: ug/kg	Prep Date: 05/24/2011	Begin 05/26/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	151	99.7	10	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	45	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130684	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 12:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-35.4- YB F		

Aliquot: 130684-FSHC-2	Units: ug/kg	Prep Date: 05/23/2011	Begin	End
Analyst: JNAIYER		Analysis Date: 05/25/2011	05/25/2011	05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	200	99.5	10	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	55	38.8	110.4	1	

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130685	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 12:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-35.4-YB-O		

Aliquot: 130685-FSHC-2	Units: ug/kg	Prep Date: 05/24/2011	Begin	End
Analyst: JNAIYER		Analysis Date: 05/25/2011	05/26/2011	05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	1270	499	50	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	41	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130687	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 15:30	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-36.7 WS-O-		

Aliquot: 130687-FSHC-2	Units: ug/kg	Prep Date: 05/23/2011	Begin 05/25/2011	End 05/25/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	05/27/2011	

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	1420	489	50	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	79	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130688	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 15:30	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-36.7 WS-F		

Aliquot: 130688-FSHC-2	Units: ug/kg	Prep Date: 05/23/2011	Begin 05/25/2011	End 05/25/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	05/27/2011	

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	194	96.4	10	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	56	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130689	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 17:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-37.5 WS-O		

Aliquot: 130689-FSHC-2	Units: ug/kg	Prep Date: 05/24/2011	Begin 05/26/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	341	200	20	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	56	38.8	110.4	1	

Field Comments	Mirex requested
Lab Comments	
QC / Sample Comments	
Approved By	<div></div> <div>On</div> <div></div>

Qualifier: * Outside acceptance limits

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130690	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 08:30	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-38.4 WS-F		

Aliquot: 130690-FSHC-2	Units: ug/kg	Prep Date: 05/20/2011	Begin 05/23/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	<9.9	9.9	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130691	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 08:30	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-38.4 WS-0		

Aliquot: 130691-FSHC-2	Units: ug/kg	Prep Date: 05/24/2011	Begin 05/26/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	<9.9	9.9	1	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	42	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130692	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 12:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-35.4 WS-O		

Aliquot: 130692-FSHC-2	Units: ug/kg	Prep Date: 05/24/2011	Begin 05/26/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011	End 05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	889	497	50	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	50	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130693	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 17:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-37.5 WS-F		

Aliquot: 130693-FSHC-2 \ 1	Units: ug/kg	Prep Date: 05/23/2011	Begin: 05/23/2011	End: 05/25/2011
Analyst: JNAIYER		Analysis Date: 05/25/2011		05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	58.1	19.6	2	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	50	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130694	Test: OEPA 590.1	Batch: 8080_0823-060111
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 09:15	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-33.3-CC-O L7NX-6		

Aliquot: 130694-FSHC-2	Begin	End
Analyst: JNAIYER	Prep Date: 05/24/2011	05/26/2011
Units: ug/kg	Analysis Date: 05/25/2011	05/27/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	3380	991	100	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	68	38.8	110.4	1	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Qualifier: * Outside acceptance limits

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130686	Test: OEPA 590.1	Batch: 8080_0824-060711
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 15:30	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-36,7 YB-O		

Aliquot: 130686-FSHC-2	Begin	End
Analyst: JNATYER	Prep Date: 06/02/2011	06/06/2011
Units: ug/kg	Analysis Date: 06/06/2011	06/06/2011

Analytes	CAS Number	Result	RL	Dil	Qualifier
Mirex	002385-85-5	744	249	25	
Surrogate	% Recovery	Lower	Upper	Dil	Qualifier
2,2',4,4',5,5'-Hexabromobiphenyl	42	38.8	110.4	1	

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS **On** 06/08/2011

Qualifier: * Outside acceptance limits

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130669	Test: OEPA 581.5	Batch: ORGLIP_0533-052411
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 14:25	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-12.5-WS-F		

Aliquot: 130669-FSHC-1	Dilution: 1	Prep Date: 05/21/2011	Begin 05/21/2011	End 05/21/2011
Analyst: JALEXANDER	Units: %	Analysis Date: 05/21/2011	05/21/2011	05/21/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	0.437		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS On 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130671	Test: OEPA 581.5	Batch: ORGLIP_0533-052411
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 14:25	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-12.5-CC-F		

Aliquot: 130671-FSHC-1	Dilution: 1	Prep Date: 05/21/2011	Begin 05/21/2011	End 05/21/2011
Analyst: JALEXANDER	Units: %	Analysis Date: 05/21/2011	05/21/2011	05/21/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	3.31		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS **On** 06/01/2011

OhioEPA

Division of Environmental Services

Sample Analysis Data Report

Sample: 130673	Test: OEPA 581.5	Batch: ORGLIP_0533-052411
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-YB-F		

Aliquot: 130673-FSHC-1	Dilution: 1	Prep Date: 05/21/2011	Begin 05/21/2011	End 05/21/2011
Analyst: JALEXANDER	Units: %	Analysis Date: 05/21/2011	05/21/2011	05/21/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	1.23		

Field Comments Mirex requested

Lab Comments jar

QC / Sample Comments

Approved By SROBERTS On 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130674	Test: OEPA 581.5	Batch: ORGLIP_0533-052411
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-YB-O		

Aliquot: 130674-FSHC-1	Dilution: 1	Prep Date: 05/21/2011	Begin 05/21/2011	End 05/21/2011
Analyst: JALEXANDER	Units: %	Analysis Date: 05/21/2011	05/21/2011	05/21/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	5.58		

Field Comments Mirex requested

Lab Comments jar

QC / Sample Comments

Approved By SROBERTS **On** 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130675	Test: OEPA 581.5	Batch: ORGLIP_0533-052411
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-WS-F		

Aliquot: 130675-FSHC-1	Dilution: 1	Prep Date: 05/21/2011	Begin 05/21/2011	End 05/21/2011
Analyst: JALEXANDER	Units: %	Analysis Date: 05/21/2011	05/21/2011	05/21/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	0.785		

Field Comments	Mirex requested
Lab Comments	
QC / Sample Comments	Sample used as MSD. There is too much mirex in the sample to obtain an acceptable recovery with the amount of spike used.
Approved By	<div>SROBERTS</div> <div>On</div> <div>06/01/2011</div>

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130676	Test: OEPA 581.5	Batch: ORGLIP_0533-052411
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-WS-O		

Aliquot: 130676-FSHC-1	Dilution: 1	Prep Date: 05/21/2011	Begin 05/21/2011	End 05/21/2011
Analyst: JALEXANDER	Units: %	Analysis Date: 05/21/2011	05/21/2011	05/21/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	3.43		

Field Comments	Mirex requested
Lab Comments	
QC / Sample Comments	
Approved By	<div>SROBERTS</div> <div>On</div> <div>06/01/2011</div>

OhioEPA Division of Environmental Services

Sample Analysis Data Report

Sample: 130690	Test: OEPA 581.5	Batch: ORGLIP_0533-052411
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 08:30	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-38.4 WS-F		

Aliquot: 130690-FSHC-1	Dilution: 1	Prep Date: 05/21/2011	Begin 05/21/2011
Analyst: JALEXANDER	Units: %	Analysis Date: 05/21/2011	End 05/21/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	1.38		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS On 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130672	Test: OEPA 581.5	Batch: ORGLIP_0534-052511
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 14:25	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-12.5-CC-O		

Aliquot: 130672-FSHC-1	Dilution: 1	Prep Date: 05/24/2011	Begin	End
Analyst: CRHINOCK	Units: %	Analysis Date: 05/24/2011	05/24/2011	05/24/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	8.69		

Field Comments Mirex requested

Lab Comments 5 Fish

QC / Sample Comments

Approved By SROBERTS **On** 06/01/2011

OhioEPA

Division of Environmental Services

Sample Analysis Data Report

Sample: 130677	Test: OEPA 581.5	Batch: ORGLIP_0534-052511
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-CC-F		

Aliquot: 130677-FSHC-1	Dilution: 1	Prep Date: 05/24/2011	Begin	End
Analyst: CRHINOCK	Units: %	Analysis Date: 05/24/2011	05/24/2011	05/24/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	1.15		

Field Comments	Mirex requested
Lab Comments	
QC / Sample Comments	
Approved By	<div>SROBERTS</div> <div>On</div> <div>06/01/2011</div>

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130680	Test: OEPA 581.5	Batch: ORGLIP_0534-052511
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 09:15	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-33.3-WS-O		

Aliquot: 130680-FSHC-1	Dilution: 1	Prep Date: 05/24/2011	Begin 05/24/2011	End 05/24/2011
Analyst: CRHINOCK	Units: %	Analysis Date: 05/24/2011	05/24/2011	05/24/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	3.18		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS **On** 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130681	Test: OEPA 581.5	Batch: ORGLIP_0534-052511
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 09:15	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-33.3-WS-F		

Aliquot: 130681-FSHC-1	Dilution: 1	Prep Date: 05/24/2011	Begin 05/24/2011
Analyst: CRHINOCK	Units: %	Analysis Date: 05/24/2011	End 05/24/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	0.640		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS **On** 06/01/2011

OhioEPA

Division of Environmental Services

Sample Analysis Data Report

Sample: 130682	Test: OEPA 581.5	Batch: ORGLIP_0534-052511
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 09:15	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-33.3-CC-F		

Aliquot: 130682-FSHC-1	Dilution: 1	Prep Date: 05/24/2011	Begin 05/24/2011	End 05/24/2011
Analyst: CRHINOCK	Units: %	Analysis Date: 05/24/2011	05/24/2011	05/24/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	1.53		

Field Comments Mirex requested

Lab Comments jar

QC / Sample Comments

Approved By SROBERTS On 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130684	Test: OEPA 581.5	Batch: ORGLIP_0534-052511
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 12:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-35.4- YB F		

Aliquot: 130684-FSHC-1	Dilution: 1	Prep Date: 05/24/2011	Begin 05/24/2011	End 05/24/2011
Analyst: CRHINOCK	Units: %	Analysis Date: 05/24/2011	05/24/2011	05/24/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	0.666		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS **On** 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130687	Test: OEPA 581.5	Batch: ORGLIP_0534-052511
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 15:30	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-36.7 WS-O-		

Aliquot: 130687-FSHC-1	Dilution: 1	Prep Date: 05/24/2011	Begin 05/24/2011
Analyst: CRHINOCK	Units: %	Analysis Date: 05/24/2011	End 05/24/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	4.63		

Field Comments Mirex requested

Lab Comments jar

QC / Sample Comments

Approved By SROBERTS On 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130688	Test: OEPA 581.5	Batch: ORGLIP_0534-052511
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 15:30	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-36.7 WS-F		

Aliquot: 130688-FSHC-1	Dilution: 1	Prep Date: 05/24/2011	Begin 05/24/2011
Analyst: CRHINOCK	Units: %	Analysis Date: 05/24/2011	End 05/24/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	0.888		

Field Comments Mirex requested

Lab Comments jar

QC / Sample Comments

Approved By SROBERTS On 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130693	Test: OEPA 581.5	Batch: ORGLIP_0534-052511
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 17:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-37.5 WS-F		

Aliquot: 130693-FSHC-1	Dilution: 1	Prep Date: 05/24/2011	Begin 05/24/2011
Analyst: CRHINOCK	Units: %	Analysis Date: 05/24/2011	End 05/24/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	1.20		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS **On** 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130670	Test: OEPA 581.5	Batch: ORGLIP_0535-052611
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 14:25	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-12.5-WS-O		

Aliquot: 130670-FSHC-1	Dilution: 1	Prep Date: 05/25/2011	Begin	End
Analyst: TBERTULSON	Units: %	Analysis Date: 05/25/2011	05/25/2011	05/25/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	1.18		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS On 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130678	Test: OEPA 581.5	Batch: ORGLIP_0535-052611
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/13/2010 18:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-32.0-CC-O		

Aliquot: 130678-FSHC-1	Dilution: 1	Prep Date: 05/25/2011	Begin 05/25/2011	End 05/25/2011
Analyst: TBERTULSON	Units: %	Analysis Date: 05/25/2011	05/25/2011	05/25/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	3.65		

Field Comments Mirex requested

Lab Comments 2 fish

QC / Sample Comments

Approved By SROBERTS On 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130683	Test: OEPA 581.5	Batch: ORGLIP_0535-052611
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 12:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-35.4-WS-F		

Aliquot: 130683-FSHC-1	Dilution: 1	Prep Date: 05/25/2011	Begin 05/25/2011	End 05/25/2011
Analyst: TBERTULSON	Units: %	Analysis Date: 05/25/2011	05/25/2011	05/25/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	0.788		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS **On** 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130685	Test: OEPA 581.5	Batch: ORGLIP_0535-052611
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 12:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-35.4-YB-O		

Aliquot: 130685-FSHC-1	Dilution: 1	Prep Date: 05/25/2011	Begin 05/25/2011	End 05/25/2011
Analyst: TBERTULSON	Units: %	Analysis Date: 05/25/2011	05/25/2011	05/25/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	4.59		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS **On** 06/01/2011

OhioEPA

Division of Environmental Services

Sample Analysis Data Report

Sample: 130689	Test: OEPA 581.5	Batch: ORGLIP_0535-052611
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 17:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-37.5 WS-O		

Aliquot: 130689-FSHC-1	Dilution: 1	Prep Date: 05/25/2011	Begin	End
Analyst: TBERTULSON	Units: %	Analysis Date: 05/25/2011	05/25/2011	05/25/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	6.01		

Field Comments	<div>Mirex requested</div>		
Lab Comments	<div></div>		
QC / Sample Comments	<div></div>		
Approved By	<div>SROBERTS</div>	On	<div>06/01/2011</div>

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130691	Test: OEPA 581.5	Batch: ORGLIP_0535-052611
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 08:30	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-38.4 WS-0		

Aliquot: 130691-FSHC-1	Dilution: 1	Prep Date: 05/25/2011	Begin 05/25/2011	End 05/25/2011
Analyst: TBERTULSON	Units: %	Analysis Date: 05/25/2011	05/25/2011	05/25/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	4.47		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS On 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130692	Test: OEPA 581.5	Batch: ORGLIP_0535-052611
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 12:00	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-35.4 WS-O		

Aliquot: 130692-FSHC-1	Dilution: 1	Prep Date: 05/25/2011	Begin 05/25/2011	End 05/25/2011
Analyst: TBERTULSON	Units: %	Analysis Date: 05/25/2011	05/25/2011	05/25/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	3.65		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS **On** 06/01/2011

OhioEPA **Division of Environmental Services**
Sample Analysis Data Report

Sample: 130694	Test: OEPA 581.5	Batch: ORGLIP_0535-052611
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 09:15	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-33.3-CC-O L7NX-6		

Aliquot: 130694-FSHC-1	Dilution: 1	Prep Date: 05/25/2011	Begin 05/25/2011	End 05/25/2011
Analyst: TBERTULSON	Units: %	Analysis Date: 05/25/2011	05/25/2011	05/25/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	5.17		

Field Comments	Mirex requested
Lab Comments	L7NX6 008,004,005,006 composite 4 jars
QC / Sample Comments	
Approved By	<div>SROBERTS</div> On <div>06/01/2011</div>

Sample Analysis Data Report

Sample: 130686	Test: OEPA 581.5	Batch: ORGLIP_0536-060611
Date Received: 04/27/2011 17:18	Matrix: SFF	Collected by: OTHERS
Begin:	End:	Sample Type: OTHER
Date Collected:	09/14/2010 15:30	Station ID:
Program: NEDO-DERR		Customer ID:
Client: NEASE_MFLBC		External ID:
Location: FT10-36.7 YB-O		

Aliquot: 130686-FSHC-1	Dilution: 1	Prep Date: 06/03/2011	Begin 06/03/2011
Analyst: TBERTULSON	Units: %	Analysis Date: 06/03/2011	End 06/03/2011

Analytes	CAS Number	Result	RL	Qualifier
%Lipids	N/A	4.18		

Field Comments Mirex requested

Lab Comments

QC / Sample Comments

Approved By SROBERTS On 06/08/2011

APPENDIX C
DATA QUALITY ASSESSMENT

**DATA QUALITY ASSESSMENT
SOIL AND SEDIMENT ANALYTICAL RESULTS
OPERABLE UNIT 3
FORMER NEASE CHEMICAL SITE
SALEM, OHIO**

This report presents the findings of the data quality review performed on the analyses of environmental samples collected at Operable Unit 3 of the Former Nease Chemical Site, located in Salem, Ohio (Site). Sediment samples were collected from September 8, 2010 to September 16, 2010; soil samples were collected from September 20, 2010 to October 5, 2010 and from March 28, 2011 to March 31, 2011 (Event). The chemical data for samples collected at the Site were assessed to identify quality issues which could affect the use of the data for decision making purposes.

The Event consisted of analysis of 52 primary soil samples, 49 primary sediment samples, and the following Quality Control (QC) samples:

- thirteen (13) field duplicate samples; and
- thirteen (13) matrix spike/matrix spike duplicate (MS/MSD) samples.

Information regarding the sample point identifications, analytical parameters, QC samples, sampling dates, and contract laboratory sample delivery group (SDG) designations are summarized in Table C-1.

Samples were analyzed for mirex, total organic carbon (TOC), percent solids, and grain size. TestAmerica Laboratories, Inc. of North Canton, Ohio (OhioVAP Certification #CL0024), performed all chemical analyses, except for grain size analysis which was performed by TestAmerica Laboratories, Inc. of Burlington, Vermont. Analyses were performed following:

- Mirex following USEPA SW-846¹ Method 8081B *Organochlorine Pesticides by Gas Chromatography* (November, 2000);
- Total Organic Carbon following USEPA Methods of Soil Analysis (MSA) *Walkley-Black Methods for the Determination of Total Organic Carbon (TOC) in Soils and Sediments* (April, 2002);
- Percent Solids following USEPA Methods for Chemical Analysis of Water and Wastes (MCAWW) 160.3 MOD; and
- Grain Size following ASTM International Method D422 *Standard Test Method for Particle-Size Analysis of Soils*.

The laboratory data were evaluated following USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review (June 2008), as applicable to the above analytical methods.

¹ USEPA, 1996, Test methods for evaluating solid waste, physical/chemical methods (SW-846): 3rd edition, Environmental Protection Agency, National Center for Environmental Publications, Cincinnati, Ohio, accessed at URL <http://www.epa.gov/epaoswer/hazwaste/test/sw846.htm>

In general, chemical results for the samples collected at the Site were qualified on the basis of outlying precision or accuracy parameters, or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data during the data validation process.

- J** The analyte was reported above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample.

The data generated as part of this Event met the QC criteria established in the respective USEPA methods and the National Functional Guidelines, with the exception of the following bulleted items highlighting qualifications to specific parameters. Although these qualifications were applied to some of the samples collected at the site, the qualifications may not have been required or applied to all samples collected. Table C-2 summarizes all qualifications applied to the data, with applicable qualifier comments.

- Several mirex and TOC results were qualified as estimated (J) because the relative percent difference (RPD) between the field duplicate and corresponding primary sample was above QC criteria.
- One TOC result was qualified as estimated (J) because the laboratory duplicate RPD was above QC criteria.
- Several mirex results were qualified as estimated (J) because the matrix spike (MS) recovery was above QC criteria.
- A number of mirex samples were qualified as estimated (J) because a surrogate recovery was above QC criteria.
- Several mirex results were qualified as estimated (J) when the continuing calibration percent difference (%D) was greater than 25%.
- Several mirex results were qualified as estimated (J) when the %D between the primary and confirmation columns was greater than 25%. The higher result was reported by the laboratory.

Several samples were analyzed at dilutions, due to high concentrations of target analytes. Dilutions do not require qualifications based on National Functional Guidelines.

Based on the data quality assessment, the analytical data for samples collected at the Site were determined to be acceptable (including estimated data) for their intended use. Generally, acceptable levels of accuracy and precision, based on laboratory control samples, matrix spike/matrix spike duplicates, field duplicate and surrogate recoveries, were achieved for the data. In addition, the data completeness (i.e. the ratio of the amount of valid data obtained to the amount expected, including estimated (J/UJ) data) was 100%.

TABLE C-1
Sample Summary and Analytical Parameters
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Lab SDG	Field ID	Matrix	Sample Date	Mirex	TOC	Percent Solids	Grain Size	Field Duplicate	MS/MSD
A0I130456	SD10-31.1R-0-2	SD	9/8/2010	x	x	x	x		
A0I130456	SD10-31.2L-0-4	SD	9/8/2010	x	x	x	x		
A0I130456	SD10-31.3R-0-6	SD	9/8/2010	x	x	x	x		
A0I130456	SD10-31.4R-0-6	SD	9/8/2010	x	x	x	x		
A0I130456	SD10-31.7L-0-4	SD	9/8/2010	x	x	x	x		
A0I130456	SD10-31.8-0-4	SD	9/8/2010	x	x	x	x		
A0I130456	SD10-31.9C-0-4	SD	9/8/2010		x	x			
A0I130456	SD10-32.0-0-6	SD	9/8/2010	x	x	x	x		
A0I130456	SD10-32.0C-0-3	SD	9/8/2010		x	x			
A0I130456	SD10-32.1R-0-1	SD	9/9/2010	x	x	x	x		
A0I130456	SD10-32.2L-0-1	SD	9/9/2010	x	x	x	x		x
A0I130456	SD10-32.3L-0-6	SD	9/9/2010	x	x	x	x		
A0I130456	SD10-32.9C-0-3	SD	9/9/2010		x	x			
A0I130456	SD10-32.9R-0-3	SD	9/9/2010	x	x	x	x		
A0I130456	SD10-33.0R-0-2	SD	9/9/2010	x	x	x	x		
A0I130456	SD10-33.1L-0-4	SD	9/9/2010	x	x	x	x		
A0I130456	SD10-DUP-01	SD	9/9/2010	x	x	x	x	x	
A0I150590	SD10-33.2L-0-6	SD	9/13/2010	x	x	x	x		
A0I150590	SD10-33.5-0-4	SD	9/13/2010	x	x	x	x		
A0I150590	SD10-33.6R-0-2	SD	9/13/2010	x	x	x	x		
A0I150590	SD10-33.7R-0-3	SD	9/13/2010	x	x	x	x		
A0I150590	SD10-33.8C-0-2	SD	9/13/2010	x	x	x	x		
A0I150590	SD10-33.8R-0-3	SD	9/13/2010	x	x	x	x		
A0I150590	SD10-33.9R-0-4	SD	9/13/2010	x	x	x	x		
A0I150590	SD10-DUP2	SD	9/13/2010	x	x	x	x	x	
A0I150590	SD10-34.4L-0-3	SD	9/14/2010	x	x	x	x		
A0I150590	SD10-34.5R-0-7	SD	9/14/2010	x	x	x	x		
A0I150590	SD10-34.6L-0-3	SD	9/14/2010	x	x	x	x		
A0I150590	SD10-34.8R-0-3	SD	9/14/2010	x	x	x	x		x
A0I150590	SD10-34.9L-0-2	SD	9/14/2010	x	x	x	x		
A0I150590	SD10-35.1R-0-2	SD	9/14/2010	x	x	x	x		
A0I150590	SD10-35.2L-0-1	SD	9/14/2010	x	x	x	x		
A0I150590	SD10-35.4C-0-4	SD	9/14/2010	x	x	x	x		
A0I150590	SD10-36.6L-0-2	SD	9/14/2010	x	x	x	x		
A0I160575	SD10-35.7R-0-2	SD	9/15/2010	x	x	x	x		
A0I160575	SD10-35.8R-0-1	SD	9/15/2010	x	x	x	x		
A0I160575	SD10-35.9R-0-2	SD	9/15/2010	x	x	x	x		
A0I160575	SD10-36.0L-0-2	SD	9/15/2010	x	x	x	x		
A0J120402	SD10-36.1C-0-3	SD	9/15/2010		x	x			
A0I160575	SD10-36.1L-0-1	SD	9/15/2010	x	x	x	x		
A0I160575	SD10-36.2R-0-1	SD	9/15/2010	x	x	x	x		x
A0I160575	SD10-36.3L-0-1	SD	9/15/2010	x	x	x	x		
A0I160575	SD10-36.4L-0-2	SD	9/15/2010	x	x	x	x		
A0I160575	SD10-37.0-0-2	SD	9/15/2010	x	x	x	x		
A0I160575	SD10-37.1R-0-2	SD	9/15/2010	x	x	x	x		
A0I160575	SD10-37.2-0-12	SD	9/15/2010	x	x	x	x		
A0I160575	SD10-DUP3	SD	9/15/2010	x	x	x	x	x	
A0I160575	SD10-37.3R-0-6	SD	9/16/2010	x	x	x	x		x
A0I160575	SD10-37.4R-0-4	SD	9/16/2010	x	x	x	x		
A0I160575	SD10-37.5R-0-6	SD	9/16/2010	x	x	x	x		

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Lab SDG	Field ID	Matrix	Sample Date	Mirex	TOC	Percent Solids	Grain Size	Field Duplicate	MS/MSD
A0I160575	SD10-37.6-0-3	SD	9/16/2010	x	x	x	x		
A0J120402	SD10-37.6C-0-2	SD	9/16/2010		x	x			
A0I160575	SD10-DUP4	SD	9/16/2010	x	x	x		x	
A0I220591	FPS10-001	SO	9/20/2010	x	x	x	x		
A0I220591	FPS10-002-01	SO	9/20/2010	x	x	x	x		
A0I220591	FPS10-003	SO	9/20/2010	x	x	x	x		
A0I220591	FPS10-DUP-H-01	SO	9/20/2010	x	x	x		x	
A0I220591	FPS10-004	SO	9/21/2010	x	x	x	x		
A0I220591	FPS10-005	SO	9/21/2010	x	x	x	x		
A0I220591	FPS10-006	SO	9/21/2010	x	x	x	x		
A0I220591	FPS10-007	SO	9/21/2010	x	x	x	x		x
A0I220591	FPS10-008-01	SO	9/21/2010	x	x	x	x		
A0I220591	FPS10-008-02	SO	9/21/2010	x	x	x	x		
A0I240563	FPS10-010	SO	9/22/2010	x	x	x	x		
A0I240563	FPS10-011	SO	9/22/2010	x	x	x	x		
A0I240563	FPS10-DUP-H-02	SO	9/22/2010	x	x	x		x	
A0I240563	FPS10-012	SO	9/23/2010	x	x	x	x		
A0I300420	FPS10-013	SO	9/28/2010	x	x	x	x		
A0I300420	FPS10-014	SO	9/28/2010	x	x	x	x		
A0I300420	FPS10-015	SO	9/28/2010	x	x	x	x		
A0I300420	FPS10-016	SO	9/28/2010	x	x	x	x		
A0I300420	FPS10-017	SO	9/28/2010	x	x	x	x		
A0I300420	FPS10-DUP4	SO	9/28/2010	x	x	x		x	x
A0I300420	FPS10-018	SO	9/29/2010	x	x	x	x		
A0I300420	FPS10-019	SO	9/29/2010	x	x	x	x		x
A0I300420	FPS10-020	SO	9/29/2010	x	x	x	x		
A0I300420	FPS10-021	SO	9/29/2010	x	x	x	x		
A0I300420	FPS10-022	SO	9/29/2010	x	x	x	x		
A0I300420	FPS10-DUP5	SO	9/29/2010	x	x	x		x	
A0J040425	FPS10-023	SO	9/30/2010	x	x	x	x		
A0J040425	FPS10-024	SO	9/30/2010	x	x	x	x		
A0J040425	FPS10-027	SO	9/30/2010	x	x	x	x		
A0J040425	FPS10-028	SO	9/30/2010	x	x	x	x		
A0J040425	FPS10-029	SO	10/1/2010	x	x	x	x		
A0J040425	FPS10-030	SO	10/1/2010	x	x	x	x		
A0J040425	FPS10-031	SO	10/1/2010	x	x	x	x		
A0J040425	FPS10-032	SO	10/1/2010	x	x	x	x		x
A0J040425	FPS10-033	SO	10/1/2010	x	x	x	x		
A0J040425	FPS10-034	SO	10/1/2010	x	x	x	x		
A0J040425	FPS10-DUP7	SO	10/1/2010	x	x	x		x	
A0J060517	FPS10-035	SO	10/2/2010	x	x	x	x		
A0J060517	FPS10-036	SO	10/2/2010	x	x	x	x		
A0J060517	FPS10-037	SO	10/2/2010	x	x	x	x		
A0J060517	FPS10-038	SO	10/2/2010	x	x	x	x		
A0J060517	FPS10-DUP8	SO	10/2/2010	x	x	x		x	x
A0J060517	FPS10-039	SO	10/3/2010	x	x	x	x		
A0J060517	FPS10-040	SO	10/3/2010	x	x	x	x		
A0J060517	FPS10-041	SO	10/4/2010	x	x	x	x		x
A1C080536	FPS10-042	SO	10/4/2010	x		x	x		x
A1C080536	FPS10-043	SO	10/4/2010	x		x	x		
A0J060517	FPS10-044	SO	10/4/2010	x	x	x	x		
A0J060517	FPS10-045	SO	10/4/2010	x	x	x	x		
A0J060517	FPS10-046	SO	10/4/2010	x	x	x	x		
A0J060517	FPS10-DUP9	SO	10/4/2010	x	x	x		x	

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Lab SDG	Field ID	Matrix	Sample Date	Mirex	TOC	Percent Solids	Grain Size	Field Duplicate	MS/MSD
A0J060517	FPS10-047	SO	10/5/2010	x	x	x			
A0J060517	FPS10-048	SO	10/5/2010	x	x	x	x		
A1C300593	FPS10-053	SO	3/28/2011	x	x	x	x		
A1C300593	FPS10-053 FD	SO	3/28/2011	x	x	x		x	
A1C300562	FPS10-054	SO	3/29/2011	x	x	x	x		x
A1C300562	FPS10-056	SO	3/29/2011	x	x	x	x		x
A1C300562	FPS10-057	SO	3/29/2011	x	x	x	x		
A1C300562	FPS10-057FD	SO	3/29/2011	x	x	x		x	
A1C300562	FPS10-058	SO	3/29/2011	x	x	x	x		
A1C310607	FPS10-066	SO	3/31/2011	x	x	x	x		

Notes:

MS/MSD - matrix spike/matrix spike duplicate

SD = sediment

SDG = sample delivery group

SO = soil

TOC = total organic carbon

TABLE C-2
Data Qualifier Summary
PDI Technical Memorandum
Nease Chemical Site OU3, Columbiana and Mahoning Counties, Ohio

Lab SDG	Field ID	Matrix	Analyte	Qualifier	Comments
A0130456	SD10-31.1R-0-2	SD	Mirex	J	Continuing calibration %D > 25%
A0130456	SD10-31.7L-0-4	SD	Mirex	J	Continuing calibration %D > 25%
A0130456	SD10-31.8-0-4	SD	Mirex	J	Continuing calibration %D > 25%
A0130456	SD10-32.1R-0-1	SD	Mirex	J	Continuing calibration %D > 25%
A0130456	SD10-32.3L-0-6	SD	Mirex	J	Continuing calibration %D > 25%
A0130456	SD10-32.9R-0-3	SD	Mirex	J	Continuing calibration %D > 25%
A0130456	SD10-33.0R-0-2	SD	Mirex	J	Continuing calibration %D > 25%
A0130456	SD10-33.1L-0-4	SD	Mirex	J	Continuing calibration %D > 25%
A0130456	SD10-DUP-01	SD	Mirex	J	Continuing calibration %D > 25%
A0130456	SD10-31.2L-0-4	SD	Mirex	J	MS Recovery above QC criteria
A0130456	SD10-31.3R-0-6	SD	Mirex	J	MS Recovery above QC criteria
A0130456	SD10-31.4R-0-6	SD	Mirex	J	MS Recovery above QC criteria
A0130456	SD10-32.0-0-6	SD	Mirex	J	MS Recovery above QC criteria
A0130456	SD10-32.2L-0-1	SD	Mirex	J	MS Recovery above QC criteria
A0150590	SD10-33.7R-0-3	SD	Mirex	J	Field duplicate RPD above QC criteria
A0150590	SD10-DUP2	SD	Mirex	J	Field duplicate RPD above QC criteria
A0160575	SD10-36.1L-0-1	SD	Mirex	J	Field duplicate RPD above QC criteria
A0160575	SD10-37.2-0-12	SD	Mirex	J	Surrogate recovery outside QC criteria
A0160575	SD10-37.5R-0-6	SD	Mirex	J	Field duplicate RPD above QC criteria
A0160575	SD10-DUP3	SD	Mirex	J	Field duplicate RPD above QC criteria
A0160575	SD10-DUP4	SD	Mirex	J	Field duplicate RPD above QC criteria
A01220591	FPS10-001	SO	TOC	J	Field duplicate RPD above QC criteria
A01220591	FPS10-008-02	SO	Mirex	J	Primary and secondary column confirmation >25%
A01220591	FPS10-DUP-H-01	SO	TOC	J	Field duplicate RPD above QC criteria
A01240563	FPS10-011	SO	Mirex	J	Field duplicate RPD above QC criteria
A01240563	FPS10-DUP-H-02	SO	Mirex	J	Field duplicate RPD above QC criteria
A01300420	FPS10-013	SO	Mirex	J	Surrogate recovery above QC criteria
A01300420	FPS10-015	SO	Mirex	J	Surrogate recovery above QC criteria
A01300420	FPS10-016	SO	Mirex	J	Surrogate recovery above QC criteria
A01300420	FPS10-017	SO	Mirex	J	Surrogate recovery above QC criteria
A01300420	FPS10-DUP4	SO	Mirex	J	Surrogate recovery above QC criteria
A01300420	FPS10-DUP5	SO	Mirex	J	Surrogate recovery above QC criteria
A0J040425	FPS10-030	SO	Mirex	J	Field duplicate RPD above QC criteria

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Data Qualifier Summary
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Lab SDG	Field ID	Matrix	Analyte	Qualifier	Comments
A0J040425	FPS10-031	SO	Mirex	J	Surrogate recovery above QC criteria
A0J040425	FPS10-DUP7	SO	Mirex	J	Field duplicate RPD above QC criteria
A0J060517	FPS10-036	SO	Mirex	J	Surrogate recovery above QC criteria
A0J060517	FPS10-037	SO	Mirex	J	Surrogate recovery above QC criteria
A0J060517	FPS10-038	SO	Mirex	J	Surrogate recovery above QC criteria
A0J060517	FPS10-041	SO	TOC	J	Laboratory duplicate RPD above QC criteria
A0J060517	FPS10-044	SO	Mirex	J	Surrogate recovery above QC criteria
A0J060517	FPS10-047	SO	Mirex	J	Surrogate recovery above QC criteria
A0J060517	FPS10-048	SO	Mirex	J	Surrogate recovery above QC criteria
A0J060517	FPS10-DUP9	SO	Mirex	J	Surrogate recovery above QC criteria
A1C300562	FPS10-053	SO	Mirex	J	Primary and secondary column confirmation >25%
A1C300562	FPS10-053 FD	SO	Mirex	J	Primary and secondary column confirmation >25%
A1C300562	FPS10-056	SO	Mirex	J	Primary and secondary column confirmation >25%
A1C300562	FPS10-057	SO	Mirex	J	Primary and secondary column confirmation >25%
A1C300562	FPS10-057FD	SO	Mirex	J	Primary and secondary column confirmation >25%
A1C300562	FPS10-058	SO	Mirex	J	Primary and secondary column confirmation >25%

Notes:

%D = percent difference
MS = matrix spike
QC = quality control
RPD = relative percent difference
SD = sediment
SDG = sample delivery group
SO = soil
TOC = total organic carbon

Qualifiers:

J = estimated value